PEER MENTORING STUDENTS WITH DISABILITIES IN A HIGH SCHOOL ORCHESTRA PROGRAM

by

Sean S. Bradley

Submitted to the faculty of the
Jacobs School of Music in partial fulfillment
of the requirements for the degree,
Master of Music Education
Indiana University
July 2020

Accepted by the faculty of the
Indiana University Jacobs School of Music,
in partial fulfillment of the requirements for the degree
Master of Music Education

Thesis Committee

_____
Lauren Kapalka Richerme, Thesis Director

_____
Brenda Brenner

_____
Julia Shaw

Acknowledgements

A special thank you to my committee, especially Dr. Kapalka Richerme, for all of your help with this project. I could not have accomplished this without your guidance. I also would like to thank Tiffany Pao and my family for their support. You kept me focused during the pandemic so that I could graduate on time!

Peer Mentoring Students with Disabilities in a High School Orchestra Program

Researchers have identified the benefits of peer mentoring in both general education (Karcher, 2005; Karcher, 2009; Karcher, Davidson et al., 2010; Karcher et al., 2002) and music education (Goodrich, 2007). Mentoring and other peer-assisted learning strategies have also been identified by researchers as effective strategies for teaching and including students with disabilities in music contexts (Jellison et al., 1984; Salvador, 2016). However, limited research has been conducted to study how peer mentoring students with disabilities unfolds in music contexts. The purpose of this study is to examine an existing chapter of the United Sound mentoring program to understand participant perceptions of one another, the perceived benefits of the program, and the factors contributing to its overall success. A total of 12 students and two teachers (*N = 14)* participated in the study. Observations were completed on three occasions at 3-week intervals. Following two of these observations, interviews with eight of the students (*n* = 8) and both teachers (*n = 2)* were conducted resulting in a total of 20 interviews. Results from the study indicated that students and teachers had positive views of one another, but peer mentors struggled to feel comfortable when discussing the topic of disability. Other notable findings were that mentors developed interpersonal/teamwork skills, increased their pedagogical awareness, and effectively used informal mentoring to assist their fellow mentors. Additionally, both teachers indicated a positive shift in how they view students with disabilities.

Table of Contents

Chapter 1: Statement of the Problem

Rationale

The inclusion and instruction of students with disabilities is a topic that is important in any educational field. Mentoring is an inclusive strategy that has been frequently put forward as a vehicle for including students with disabilities (Jellison et al., 2015; Lapka, 2006; Ogilvie, 2011). There is a variety of literature addressing topics surrounding both mentorship and teaching students with disabilities in and outside of music. These related areas include cross-age peer mentoring, peer tutoring, and cooperative learning. In general education research, mentoring of similarly-abled peers has been shown to improve various academic outcomes for mentees (Karcher, 2005; Karcher et al., 2010; Karcher et al., 2002) as well as mentors (Geddes, 2016; Karcher, 2009; Karcher et al., 2002). In music education literature, peer tutoring and other peer assisted learning strategies have also been shown to be beneficial for the students involved (Alexander & Dorow, 1983; Johnson, 2011; Webb, 2012).

Karcher (2009) found that high school mentors participating in a cross-age peer mentoring program developed stronger connections to school and peers, including culturally different peers, and improved self-perceptions of self-esteem ($p = .03$). A factor contributing to this idea of connectedness to school was identified by Karcher et al. (2010) in a study of the program Big Brothers Big Sisters ($N = 1{,}139$). Their findings indicated that having a mentor with a positive attitude toward youth can have a significant positive effect on younger mentees' connectedness to school ($p < .05$).

Additional evidence of mentors benefitting from the mentoring process was found by Geddes (2016). The purpose of this exploratory case study was to examine the impact of peer mentoring in a high school mentorship program, including how the program contributed to

mentors' school connectedness, social capital, and prosocial skill development. There were 14 similarly-aged participants in the study, seven mentors and seven mentees. Analyses of the data provided evidence that participation in a peer mentorship program improves peer mentors' prosocial skills, school connection, and social capital.

While these results demonstrated the benefits of mentorship, Rodriguez (2010) found that a less organized mentoring program may actually lead to dissatisfaction among participants. The key factors that led to these conclusions were mentor to mentee ratio (1:25) and frequency of meetings. The highly imbalanced ratio and infrequent meetings did not provide opportunities for substantial personal connections. Additionally, while Karcher et al. (2010) found that positive mentors can have positive effects on mentees' connectedness to school, they found that a mentee with a negative mentor can decrease mentees' connectedness to school. While these studies present some downsides and issues with mentoring programs, the bulk of the literature demonstrates that mentoring is a beneficial tool for all parties involved.

Music education researchers have examined peer mentoring (Goodrich, 2007; Taylor, 2016) as well as the related cooperative learning practices of peer assisted learning (Alexander & Dorow, 1983; Andrews, 2013; Darrow et al., 2005; Johnson, 2011; Madsen et al., 1988; Webb, 2012) and peer tutoring (Alexander & Dorow, 1983). Johnson (2011) examined peer instruction strategies in choir and band settings ($N = 131$). He found that for both band ($n = 71$) and choir ($n = 60$), peer instruction improved rhythm reading achievement more than traditional instruction. This contrasts with a study by Cornacchio (2008), who found that 4th grade students ($N = 53$) did not differ significantly with musical composition achievement when divided into cooperative learning and individual (traditional) instruction groups.

Alexander and Dorow (1983) examined the effect of peer tutoring on tutor and tutees' music performance skills. A performance pre- and post-test design was used with control and experimental groups to assess differences in musical achievement. Tutors were also trained in either approval or disapproval techniques. One of the notable findings of the study was that tutees who had a tutor trained in approval strategies yielded significant differences from pretest to posttest. In other words, having a positive, reaffirming tutor can significantly contribute to tutee growth. These results correspond with the general education research of Karcher et al. (2010).

Research on peer mentorship in music from Goodrich (2007) and Taylor (2016) found conflicting results. Goodrich (2007) found many positive benefits to peer mentorship in a high school jazz band, while Taylor's (2016) analysis of mentoring at the International School of Kuala Lumpur found many flaws with running such a mentorship program in the midst of a busy instrumental music program. Goodrich (2007) states, "Peer mentoring contributed to the success of this ensemble by aiding in a heightened musical development rate of the students, making rehearsal time more efficient for the director, and by enhancing the social growth of the students" (p. 110). Goodrich also identified social mentoring, mentoring that does not involve discussions of music, as an emergent theme. This echoes Taylor's (2016) notion that informal mentoring is a positive characteristic of effective mentoring programs. The emergent themes from Taylor's (2016) study indicated that while a one-to-one mentor/mentee ratio and informal peer mentoring were program strengths, the lack of administrative and instructor support as well as difficulty scheduling meetings between mentors and mentees were factors that hindered the success of the mentoring program.

The evidence for peer tutoring and peer mentoring is substantial, both in and out of music contexts. However, limited study has been conducted on the use of mentoring programs as a tool for teaching students with disabilities[1] in music. Most of the literature on music and disabilities involves the study of teacher attitudes toward disability and inclusion (Gfeller et al., 1990; Nabb & Balcetis, 2010; Scott et al., 2007; VanWeelden & Whipple, 2014). A couple of authors have identified peer assisted learning strategies as useful teaching strategies in this important inclusion process. Jellison et al. (1984) found that students with disabilities who were included in music classes with typically developing peers learned most efficiently and had the most social interactions when taught in small, peer learning groups. In a qualitative case study of a single instructor, Salvador (2016) found that peer assistance was a strategy that helped an experienced teacher effectively include students with disabilities in her elementary music classroom.

VanWeelden et al. (2017) examined a peer mentoring program in music to understand how it helped to shape the experiences of students with and without disabilities in a high school choir. In their study, VanWeelden et al. (2017) found that peer mentors (n = 7), who were typically developing, perceived benefits from the program and viewed themselves as more successful in choir after this program. However, the mentees' (n = 7) posttests indicated a decrease in their perceptions of success in choir. Interestingly, even with this decreased perception, the mentees indicated a desire to stay with their mentors due to social reasons.

Statement of the Problem

Numerous practitioner-based articles have been published promoting the development of mentoring programs in music education (Jellison et al., 2015; Johnson, 2015; Sheldon, 1997;

[1] I chose to use the term disability in this study based on both my own experiences with individuals with disabilities (and their collective preference for this label) and my own training as an educator.

Sheldon, 2001). The current research on peer mentorship outside of music contexts has consistently demonstrated positive results for both mentors and mentees (Karcher, 2005; Karcher, 2009; Karcher et al., 2010; Karcher et al., 2002). Likewise, several music researchers have documented the benefits of peer-assisted learning strategies, including mentoring (Alexander and Dorow, 1983; Darrow et al., 2009; Goodrich, 2007; Johnson, 2011; Madsen et al., 1988; Salvador, 2016; Webb, 2012). While a few studies have had mixed results, (Cornacchio, 2008; Taylor, 2016; VanWeelden et al., 2017), a majority of the literature indicates benefits for peer-assisted learning and mentoring strategies. Given the demonstrated benefits of peer mentoring and peer assisted learning strategies, and recommendations from researchers that mentoring can be used as an effective tool for teaching students with disabilities, it is imperative that music educators examine existing peer mentoring programs to understand how they function and how they shape the experiences of students with and without disabilities.

Purpose Statement

The purpose of this study is to examine an extant chapter of the United Sound program, an organization that provides "musical performance experiences for students with special needs through peer mentorship" (United Sound, 2016a), to understand how it impacts participants' perceptions of one another, the perceived benefits for participants, and the factors contributing to the program's success.

Research Questions

The research questions used to guide this study were the following:

(1) How do participants describe their views of one another?

(2) What do students perceive to be benefits of the peer mentoring program?

(3) What factors contribute to the success of this mentoring program?

Delimitations

The purposeful sample of this study was selected from high school students and teachers who are currently members of a chapter of an after-school mentoring program called United Sound. This chapter was selected as being part of a highly successful music program. The school is in an affluent area. The phenomena that I am examining will be limited to mentoring sessions, as I am unable to observe student interactions in other classes or during concerts or other events that the United Sound chapter may hold. Additionally, the participants are all fluent in English

Definition of Terms

Cross-Age Peer Mentoring: A mentoring relationship in which an older student, generally high school-aged, serves as a mentor for a younger, typically elementary or middle school-aged, student (Karcher, 2009).

Disability: "(A) a physical or mental impairment that substantially limits one or more major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment" (Americans with Disabilities Act, 1990).

Inclusion: "The term used to describe school-based arrangements in which students with and without disabilities learn together in general education settings" (Baglieri & Shapiro, 2012, p. 3).

Mentor: a. "trusted counselor or guide" or b. "tutor, coach" (Mentor, 2018).

Peer Assisted Learning: "An instructional arrangement where peers help each other to gain knowledge until it becomes a common possession" (Topping & Ehly, 2001, as cited in Johnson, 2015).

Tutor: "a person charged with the instruction and guidance of another" (Tutor, 2018).

Peer Mentoring: Mentoring that takes place between individuals of similar age.

Peer Tutoring: Tutoring that takes place between individuals of similar age.

Chapter 2: Review of Related Literature

This literature review presents studies from a variety of areas related to the topics of peer mentorship, individuals with disabilities, and music. The chapter is divided into four sections: (a) peer mentoring in general education literature, (b) peer to peer learning in music, (c) music and disability studies, and (d) strategies for teaching students with disabilities in music. The first section includes studies from non-music literature as there is a substantial amount of relevant research from general education researchers. The second section details research on a variety of cooperative learning and peer tutoring strategies in music classrooms. The third section includes research on attitudes toward disability as well as peer tutoring students with disabilities. The fourth section includes studies that cover inclusive teaching strategies as well as studies that specify peer learning as the main strategy for including students with disabilities in the music classroom.

Peer Mentoring in General Education Literature

There is a substantial amount of research on peer mentoring and related areas in general education. This section will focus on research that specifically uses the phrase “peer mentoring” or research that examines existing peer mentoring programs. An example of an existing program is The Sources of Strength suicide prevention program, which is a national program that trains peer leaders to change norms surrounding suicide within school communities (Sources of Strength, n.d.). Wyman et al. (2010) conducted an experimental study to determine the effectiveness of Sources of Strength in shaping school culture and attitudes about suicide for peer leaders and the general student population. There were 18 high schools, 6 metropolitan and 12 rural, that were randomly assigned to immediate intervention or control groups. A multiple baseline design was utilized, and surveys were administered to 453 peer leaders from all 18

schools and 2,675 students in the rural schools. Peer leaders were trained and monitored by adult mentors to promote resources and limit social stigma on reaching out for help. These peer leaders were encouraged to reach out to their own social groups to change the mentality of their peers on issues related to suicide awareness. The results of the study demonstrated benefits for the peer leaders as well as the students in the general school population.

The mentorship training improved peer leader connectedness to adults, adaptive norms regarding suicide, and their overall school engagement (Wyman et al., 2010). These trained peer leaders were also four times more likely to refer a suicidal friend to an adult when compared to their untrained peers in the control groups ($p = .03$). The intervention also increased the peer leaders' perception of adult support for suicidal youth ($p < .001$). This correlation increased the most among students who had a history of suicidal thoughts. There was also an increase in the social acceptance of students seeking help from adults ($p < .001$) and overall school engagement also increased in trained peer leaders ($p < .043$). The training also increased peer leaders' support for peers ($p < .015$) and there was a positive result for the intervention impact of connecting distressed peers to adults ($p = .08$).

The general student population saw benefits, as well. Two positive and significant intervention effects were reported for this group (Wyman et al., 2010). First, student perceptions of adult help for suicidal peers had a significant positive increase, $ES = 0.63$; 95% CI [0.29, 0.97], as did norms for help-seeking from adults, $ES = 0.58$; 95% CI [0.24, 0.91]. These results demonstrate that nationwide mentoring programs can be successful with adequate training and implementation. While this study was focused on connectedness to peers and adults, mentoring programs could also be beneficial for other populations of students, including those with disabilities.

Cross-age peer mentoring is another area of research in general education literature that has been studied. Karcher (2005) examined the effect of cross-age peer mentoring on mentee connectedness and self-perceptions. The purpose of this pre- and post-test experimental study was to examine the effect of mentor attendance on mentee outcomes after six months of mentoring. The participants of the study were defined by the authors as a combination of 73 low-risk and high-risk youth from rural communities. Mentees were from grades four through eight while mentors were from grades eight through twelve. The participants were overwhelmingly Caucasian (only one mentor was Hispanic). Measures for the study included the following: teacher-rated risk status, *Hemingway: Measure of Preadolescent Connectedness*, *Harter Self-Perception Scale for Children*, *Primary Mental Health Project (PMHP) Child Rating Scale*, and attendance (Karcher, 2005).

Mentoring sessions took place for two hours after school, twice per week, for a total of 144 contact hours. A connectedness curriculum was designed with activities to foster relationships between mentors and mentees. Activities included teacher interviews, role-playing activities, and monthly social events that parents were encouraged to attend. Pre- and post-assessments were collected from groups of 15-20 participants.

The results of the study followed "a theory-driven evaluation approach described by Chen (1990), first a normative evaluation was conducted using MANCOVA, and second, a causal evaluation of intervening mechanisms (i.e., proximal and enabling outcomes) was conducted using correlations and regression analyses" (Karcher, 2005, p. 70). Attendance results for mentors were reported as follows "*M = 71.92, SD = 20.02, range = 24-94%*" and mentee attendance was "*M = 75.08, SD = 22.38, range = 10-95%*" (Karcher, 2005, p. 72). Results indicated that a linear relationship was established between mentor attendance and mentee self-

management, but no relationship was found between mentee attendance and mentee self-management. There were also positive relationships between mentor attendance and mentees' self-reported self-management skills as well as their social skills and self-esteem. Finally, the attendance of mentors was positively related to the total connectedness change score. Given the impact of mentor attendance, a mentoring program that utilizes multiple mentors for each mentee may be of particular interest to researchers.

Additional research that examined how mentoring affects mentees was conducted by Karcher et al. (2010). They were specifically interested in the effect of mentor attitudes in shaping mentee outcomes. The study's participants were 1,139 youth in grades four through nine. The treatment group (n = 565) were matched with mentors, while the control group (n = 574) were not assigned mentors until the end of the study. The participants were selected from 71 schools associated with Big Brothers Big Sisters (BBBS), and 41 of these schools were sampled for analysis.

Data were collected from 221 volunteer mentors, 205 mentees, and 182 control-group youth at three different points throughout the study: an initial baseline; a 9-month assessment; and a 15-month assessment (Karcher et al., 2010). Mentees and mentors were surveyed at these times using a variety of measures. The response rates ranged from 81-100% over the 15-month period. The measures for the study were: *Attitudes Toward Youth in Mentor's Community* (Herrara et al., 2007); the six-item *Connectedness to School* subscale of *The Hemingway: Measure of Adolescent Connectedness* (Karcher, 2008); *Overall Academic Achievement* (Pierce, Hamm, & Vandell, 1999); social acceptance as measured by items drawn from Harter (1985); *Negative Contribution to the Classroom* scale (Herrera et al., 2007); *Youth Emotional Engagement* scale (Jucovy, 2002); match length between mentor and mentees measured in days;

Teacher-Student Student Relationship Quality (Pianta, 1991); *Prosocial Behavior* (Ladd & Profilit, 1996); and teacher-reported truancy. The initial baseline tests yielded two categories of mentees for both the control and the experimental groups. Students were categorized as either "Academically Connected" or "Academically Disconnected" (Karcher et al., 2010, p. 219). Mentors were categorized into groups based on positive or negative attitudes toward youth with the *Attitudes Toward Youth* scale (Herrara et al., 2007).

The results of the study indicated a few distinctions in outcomes based on mentor and mentee profiles. A series of hierarchical linear regression models established that mentors with positive attitudes toward youth predicted an increase in their youth mentee's emotional engagement at the nine-month assessment, $t(192) = 2.42$, $b = .12$ (.05), $p < .05$ (Karcher et al., 2010, p. 221). A final analysis was conducted to examine connections between mentor attitudes and mentee outcomes. ANCOVAs were conducted for disconnected and connected youth separately. There was only one statistically significant main effect for the first set of outcome variables: teacher relationship quality, $F(2, 185) = 4.20$, $p < .02$. Significantly better relationships were reported in disconnected mentee/positive mentor pairs, suggesting that initially disconnected mentees benefitted more from a positive mentor. Interestingly, the second ANVOCA found that connected mentees with negative mentors had more negative responses in their classrooms. These findings add to the list of factors that can set a mentorship program up for success or failure. Further research is needed to better understand how the attitudes of mentors toward their mentees contributes to the overall success of a mentoring program.

The impact of peer mentoring on mentors has also been examined in the general education literature (Karcher et al., 2002). This study sought to examine the relationship between changes in connectedness and mentors' academic achievement. The study's participants were 30

public school fifth grade students who were randomly separated by gender and assigned to a mentoring or comparison group. The mentors of these elementary students were "18 high school students at the St. Stephen's Episcopal School who made a two-year commitment to participate in the program" (p. 40). Mentors were able to participate in the selection of their mentees, whom they were paired with for the length of the study (one year). The mentoring program itself included nine Saturday events and a two-week summer session. The Saturday events included academic activities in the mornings and social activities, such as hiking, in the afternoons. The summer sessions were also described as having an academic focus, but it was unclear whether or not social activities also took place during this time. Parental involvement was also encouraged throughout the program.

The measure for the study was *The Hemingway: Measure of Pre-Adolescent Connectedness* (Karcher, 2001), which is a 40-item questionnaire that examines the strength of the connection between the adolescent and "friends, parents, and teachers as well as the degree of their caring for school, culture, religion, and their futures" (Karcher et al., 2002, p. 40). In this study, only half of the eight subscales could be used due to inter-item subscale reliabilities below .60, which left connectedness to parents, friends, future, and school as reliable subscales. Another measure, *The Wide Range Achievement Test* (Jastak & Wilkinson, 1994, 3rd revision) was used to assess academic achievement in math and spelling.

Preliminary analysis indicated variable differences between intervention and control groups. Pretest results showed that "mentees reported lower connectedness to friends ($M = 3.89$; $SD = .55$) than the control group ($M = 4.42$; $SD = .55$), $F(1, 24) = 5.25$, $p < .05$. The control group demonstrated higher math achievement ($M = 35.23$; $SD = 3.87$) than the mentees ($M = 30.08$; $SD = 2.50$), $F(1, 24) = 15.25$, $p < .001$" (Karcher et al., 2002, p. 41). Due to these

differences, the scales included in the study were "Spelling Achievement and the Connectedness to School, Future, and Family subscales" (Karcher et al., 2002, p. 41).

Over the course of the year-long mentoring, social and academic activities took place. Mentors met with mentees on nine Saturdays from September to May that eventually prepared mentor/mentee groups for a two-week summer program. After the year-long process, the previously described measures were administered. The major findings from the results were that mentor/mentee pairs increased spelling achievement due to a stronger connection with parents. Students in the control group demonstrated a decrease in connectedness to parents as they transitioned from elementary school (5^{th} grade) to middle school (6^{th} grade). These findings were ultimately modest, but they do contribute to the literature that suggests mentoring is beneficial for mentors.

Karcher (2009) also examined the effect of peer mentorship on mentors. This quasi-experimental study specifically examined the effect of cross-age mentoring programs (CAMPs) on mentors' perception of self-esteem and connectedness to school. The CAMP for this study was set up as a weekly, after-school gathering between students and their mentor that included academic and social activities. The program also included a daylong event held monthly that allowed parents to meet their children's mentor. Participants for the study were 46 high school mentors who were mostly female (n = 34) and from rural families. Karcher used the previously developed CAMP model to establish a formal mentoring program. Results of the program were measured with *The Hemingway: Measure of Adolescent Connectedness*, which is a self-report survey of 78 Likert scale items. Other measures included the 75-item *Inventory of Parent and Peer Attachment (IPPA*), which had good inter-item reliability for peers, $\alpha = .75$; mother, α

= .72; and father, α = .78. Finally, a self-report, 4-point scale, Self-Esteem Questionnaire (SEQ) that had most alpha scores greater than .80.

Tests were conducted pre-intervention to control for factors such as age and sex. "The scales revealed only two significant differences, which were on two family-related scales: father connectedness and father attachment. On both, comparison youth scored higher at pretest" (Karcher, 2009, p. 297). The same MANCOVAs were run at the end of treatment. "There were posttest differences on the school-related scales, which included connectedness to school, teachers, culturally different peers, peers, self-in-the-future, and friends; extracurricular, sports, and school self-esteem; and attachment to peers" (Karcher, 2009, p. 298). This positive change in these categories yielded a large effect size, $F(11, 66) = 2.11$, $p = .03$, partial $\eta 2 = .26$ (Karcher, 2009). These results demonstrated that mentors benefited strongly from CAMP within this group. The author acknowledged that the use of a non-equivalent comparison group created concerns for the internal validity of the study. Despite these concerns, for the present study, it is important to consider how United Sound may have potential benefits for the mentors involved.

Geddes (2016) also sought to understand how mentoring impacts mentors. The study followed an exploratory case study design of a peer-to-peer mentoring program in a public high school. The purpose of the study was to examine the impact of peer mentoring in a high school mentorship program and how the program contributed to mentors' school connectedness, social capital, and prosocial skill development. Mentors ($n = 7$) applied for the mentoring program and were selected by guidance counselors while mentees ($n = 7$) were identified as at-risk by their core teachers and counselors. Data were collected through surveys, interviews, documentation review, observations, and physical artifacts. Analyses of the data provided evidence that participation in a peer mentorship program improves peer mentors' prosocial skills, school

connection, and social capital. Further research is needed to understand how mentoring programs benefit mentors as well as mentees.

Rodriguez (2010) conducted a qualitative case study on cross-age peer mentoring to understand the perspective of 11th and 12th grade mentors in a diverse suburban high school. The mentoring program was a schoolwide effort to promote the values of the school by having 11th and 12th grade students serve as models for incoming freshmen. Mentoring sessions consisted of 45-minute group meetings of 25-30 freshmen and five to six mentors, rather than traditional one-on-one mentoring. During these meetings, students participated in planned activities coordinated by mentors, although no specific activities were detailed in the paper. Data were collected through observations, a focus group session, journal entries and a survey at the conclusion of the program. There were six participants who were selected to be the primary focus of this case study and a total of 74 mentors completed a survey at the end of the year. Results of the study indicated that mentors had mixed feelings about the overall success of the mentoring program. Some positive attributes that they listed were the friendships they developed with incoming freshmen and the rewarding feeling they had from serving as leaders. They also had many useful critiques of the program. Some of the suggestions for improvement included a better mentor/mentee ratio, more one-on-one opportunities with students, and less structured meeting assignments. The author also indicated that there was a 5% decrease in mentor attendance each month of the program, which also contributed negatively to its overall impact. It was the belief of the author that these issues outweighed the benefits of the program as evidenced by this statement, “It is safe to say that there were some successful elements of the program; but it appears that there were more problems than benefits” (p. 115). Future qualitative research on mentoring programs should not be limited to just the perspectives of the mentors. Gathering

information from all participants, including mentees and teachers, would provide a more well-rounded understanding of mentoring programs.

Peer to Peer Learning in Music

Peer tutoring is an area related to peer mentoring that has been studied in music classrooms. Johnson (2011) observed the effects of peer-based instruction on rhythm reading achievement in instrumental and choral ensembles. The participants of the study ($N = 131$) were 71 band and 60 choir students from a large urban school in a major metropolitan area. Students had similar levels of school music experience ($M = 5.16$ years, $SD = 1.04$). A randomized, post-test only design was used to conduct the research. Students were randomly assigned to either a teacher-led treatment group or a peer-based instruction treatment group. During a two-week period, students were given four 30-minute rhythm lessons using standard music instruction materials. Students assigned to the peer-learning group also received an additional 30-minute lesson on fostering learning in a reciprocal teaching environment. At the completion of the two weeks, all students performed a short etude.

Measures for this study included a researcher-developed *Measure of Rhythmic Counting Ability* (Johnson, 2011) and the *Musical Self-Perception Inventory* (Vispoel, 1994). The *Measure of Rhythmic Counting Ability* determined rhythmic skill through the completion of etudes and grading by two independent observers. Points were deducted for inaccurate rhythms, loss of steady pulse, and failure to recover from mistakes. The *Musical Self-Perception Inventory* is an 84-item, self-report survey that asks participants to rate their perceptions of their own various music competencies on a 6-point scale (Johnson, 2011).

The results of the study indicated that students in the peer-based instruction group had significantly higher achievement than students in the direct instruction group, $t = 3.352$, $df = 129$,

$p < .001$ (Johnson, 2011). Interrater reliability for the rhythm measure was extremely high (.98) and reliability coefficients were also high for the two subsections of the rhythm reading achievement measure: rhythmic accuracy (.97) and counting ability (.92). Internal reliability for the *Musical Self-Perception Inventory* was .93. Two separate two-way ANOVAs were used to see if ensemble type or self-perception had significant effects on rhythm achievement. No significant interaction was found between music reading self-concept and mode of instruction, $F(1,129) = .363$, $p = .69$. It was also common for students who had higher self-report rhythm reading to have high rhythm achievement, but students in the peer learning group consistently did better on the posttest than the teacher-led group ($p = .015$), whether or not they had a high self-concept. A second analysis found a significant interaction effect, $F(2,128) = 4.855$, $p < .029$, with the type of ensemble moderating the effect of peer versus teacher-led instruction. Choir students in the traditional teaching setting scored much lower on the rhythm reading tests than the choir students in the peer learning group. While students in the instrumental group also performed better when they received peer instruction, the gap between the two instrumental groups was not as large as the gap between the two choir groups. These findings contribute to the body of literature that suggest peer to peer instruction is a beneficial tool in the music classroom.

The effectiveness of peer learning in groups was also examined by Cornacchio (2008). This experimental study sought to determine if cooperative learning was an effective way to teach music composition and if there was a positive effect for students' on-task behaviors as well as acceptance of their peers. Participants ($N = 53$) were randomly assigned to either cooperative learning ($n = 26$) or individualistic instruction ($n = 27$) groups from two, intact, heterogeneous fourth grade classes of 48 students each. Groups participated in seven instructional interventions over a five-week period in which they were given a 10-minute, teacher-led lesson and then 10

minutes to work on a worksheet. Students in the first experimental group used the last 10 minutes to work on the worksheet individually, while students in the second group participated in cooperative learning. Lessons at the beginning and end of the five-week period were recorded for nine minutes each and coded for on-task or off-task behavior as well as cooperative or noncooperative behaviors. Two pre- and post-tests were used to measure music composition and peer acceptance. The first measure was a musical composition measure designed by the researcher and a modified version of an acceptance scale from Yager et al. (1985).

Both the individual and the cooperative-learning groups demonstrated significant gains in composition achievement ($p < .001$). The two groups also increased the amount of time that they spent demonstrating on-task behaviors ($p < .001$). However, there was no significant interaction ($p > .05$) between these two experimental groups' composition pre- and post-test scores. There was also no significant difference ($p > .05$) between groups for acceptance of peers. Additionally, the individualistic group demonstrated a greater percentage increase in on-task behaviors, $t\ (11) = 9.21$, $p < .001$, $d = 1.5$, than the cooperative group, $t\ (12) = 4.17$, $p < .01$, $d = 1.1$. However, the cooperative learning group did demonstrate a higher number of on-task behaviors over the course of the video observations (Cornacchio, 2008). These findings contrast with the findings from Johnson (2011). Given these contrasting findings, additional research is needed to study how peer learning functions in established, successful programs.

A quasi-experimental study was conducted by Darrow et al. (2005) to examine the effect of peer tutoring on music learning in elementary general music settings. The study also sought to assess a classwide peer tutoring model. The participants for the study were 48 female and 56 male fifth-grade students ($N = 104$) from two elementary schools. All participants were part of the district's general music classes that met for 40 minutes, three times weekly. The researchers

chose to use knowledge of key signatures as the measure of growth. Pre- and post-tests were used along with subtests of major and minor keys to assess student understanding after each tutoring session.

Participants were randomly assigned to be either a tutor or tutee in the first intervention stage of the research. Tutors were given specific training by their teachers to employ strategies like modeling, reinforcement, and error-correction with their tutees. The tutors also practiced playing the role of tutor while one student acted as a tutee. During the first intervention, the tutors were given flat key worksheets with scripted ways to teach students to figure out each key. Tutees were given the same worksheets without the scripts. The tutor and tutee pairs then worked on the worksheets for 40 minutes while the teachers moved freely among the pairs to assist and offer help. Following the first intervention, the flat-key written subtest was given. During the second intervention, the roles of tutor and tutee were reversed, and the worksheets now dealt with sharp keys. The tests were scored based on the number of correct responses given out of ten. One week after the interventions a posttest was administered to all participants that included written tests with both flat and sharp keys (Darrow et al., 2005).

The results of the study indicated a significant difference from pretest to posttest for all students, $t(103) = 15.43$, $p < .001$ (Darrow et al., 2005). However, the authors indicated that "these data are not overly impressive considering that the pretest scores were so low, with a mean of 0.09 and a standard deviation of 0.44" (p. 19). The posttest mean was 6.66 with a standard deviation of 4.39. There were no significant differences found between tutors and tutees on the flat key signature test; however, there was a significant difference on the sharp key signature subtest, "$t[103] = 2.30$, $p = .023$, with tutees scoring significantly higher than tutors" (p. 19). There was not a significant difference on the sharp key signature section of the posttest,

which indicates that the tutees did not retain their initial understanding of the information. Finally, participant comments were collected and categorized by the researchers as positive, negative, or neutral. The researchers' analysis of the data concluded that "71% of all comments made were positive, 9% were neutral, and 20% were negative," with 78% of the negative responses coming from one of the two participating schools (p. 20).

The results of this study also contribute to mixed results when it comes to peer tutoring in music education. The researchers indicated that the lack of a control group that used traditional teacher-led instruction makes it impossible to compare the effectiveness of the results to traditional teaching. The low pretest scores also create limits for generalizability, since there was undoubtedly room for tremendous growth from pretest to posttest (Darrow et al., 2005). Qualitative analysis of mentor programs may be needed to better understand the nuances of what makes mentoring programs successful in the first place.

The effects of peer tutoring on both tutors' and tutees' music performance skills were examined by Alexander and Dorow (1983). In addition to performance skills, the researchers sought to compare the effects of tutors who used approval and disapproval techniques. The study's participants included 54 fourth grade beginning band students from three elementary schools in a suburban setting. The experimental method used was a performance pre- and post-test designed by the authors of the study based on lessons 7 through 12 of *The Band Booster* (Kinyon et al., 1960). Tests were individually administered to all participants (tutors and tutees) and recorded in the band room on a Sharp cassette tape recorder. Two independent observers listened to the taped performances and scored them based on the number of errors. Interjudge reliability was .87. The independent variables for the experiment were tutor/tutee groupings with approval training, tutor/tutee groupings with disapproval training (error correction), and band

classroom instruction. The experiment generated somewhat inconclusive results due to design flaws in the research.

A second experiment was designed to refine issues that may have existed in the initial experiment (Alexander & Dorow, 1983). Assessment of the performances changed to a point addition system rather than an error detection system: points were awarded for correct playing rather than for mistakes or errors. In addition, the piece was no longer taken directly from *The Band Booster*. A metronome was kept on throughout student performances, and "additional reliability checks were made on the tutors' approvals and disapprovals" (Alexander & Dorow, 1983, p. 39). "Further changes included randomly selecting not only the assignment of the tutor to the treatment group as in experiment 1, but also randomly assigning tutor and tutee partners within each similar-instrument group" (Alexander & Dorow, 1983, p. 39). Participants for the second experiment were "48 fourth- and fifth-grade instrumental music beginners in three elementary schools in the same community as experiment 1" (Alexander & Dorow, 1983, p. 39). Similar to experiment one, independent observers scored the performance tests. Interjudge reliability was $r = .98$.

Experiment two yielded similar results to experiment one but did demonstrate a few differences. "A one-way analysis of variance performed on only the tutor's posttest scores did not show a significant difference, but a difference did appear in a one-way analysis of variance of tutees' scores, $F(2, 21) = 3.69$, $p < .05$" (Alexander & Dorow, 1983, p. 41). It was demonstrated that the approval tutees performed significantly higher than those in the control group, but there was no significant difference in the disapproval tutee group. Finally, "Dependent *t* tests were performed on all cells from the pre- to post-test. The two experimental groups and control tutors improved significantly from pre- to post-test, but the control tutees did not" (p. 42).

These data demonstrate not only the benefits of peer interaction, but positive peer reinforcement in creating successful tutor/tutee relationships. Additional research is needed in order to understand how these positive peer strategies can impact students with disabilities.

One example of qualitative research on the topic of peer learning in music is a practitioner-based study of an extra-curricular recorder class (Andrews, 2013). The practitioner-based design used elements of case study and action research. The researcher sought to find the ways in which students' learning behaviors differed between teacher-directed and group learning lessons. The lessons were conducted in stages, with the first being teacher-directed and the second being group-led with instructor facilitation. Videos were made of these lessons and transcribed for analysis. Andrews also interviewed participants to better understand their perceptions of the two different lessons. "The group learning lessons used aspects of the Musical Futures1 informal learning approach, particularly self-directed learning in friendship groups, using aural models on CD, with the teacher's role facilitative rather than directive" (p. 125). Musical Futures is a program that provides curriculum and other teaching resources to teachers in the UK. The participants of the study were 12 pupils, ages 9-11, from a state school in East London taking part in The Year Five and Six Recorder Club.

According to the author, the results of the study showed student responses were positive for both the teacher-directed and group learning sessions (Andrews, 2013). The group learning sessions generally moved at a slower pace since students were figuring out music from CDs on their own. However, this did not deter students from finding the experience enjoyable. Many students indicated that the challenges of teaching themselves created frustration at times, but they reported that the joys of overcoming this obstacle made it a rewarding learning experience. Students also demonstrated scaffolding, as well as modeling and imitation behaviors during the

group learning sessions. These results are promising, and qualitative research like this should be replicated in order to discover other ways in which peer instruction may differ from teacher-led instruction.

Peer learning in music was also examined through a qualitative lens by Webb (2012). The purpose of this multiple case study was to better understand the ways that peer tutors think and learn in the context of a high school string orchestra program. There were four high school-aged participants who served as peer tutors by teaching string lessons to other students within the orchestra program. The participants were selected based on the pre-existing nature of their tutoring sessions within their respective orchestra programs. Each tutor was video recorded and observed by the researcher for three 30-minute private lessons, and initial and post-lesson interviews were conducted to supplement these observations. Examples were drawn from the videos for final interviews. Participants also kept journals that they filled out shortly after each teaching episode. The researcher was a nonparticipant in the study.

After analysis of the qualitative data, the following themes emerged: reorganization and communication of musical concepts, pedagogical choices and prior experiences, the enjoyment and value of tutoring, tutor perception of roles, and a tutor's pedagogical comfort zone (Webb, 2012). The analysis indicated that students were very conscious of their teaching choices, they reflected on staying within their pedagogical comfort zones, and they generally stuck to things they had experienced in private lessons. They also verbalized an understanding of the ways in which their role as tutor was beneficial to their own learning. In their interviews, the tutors noted a distinction between their role as tutor as opposed to that of a traditional teacher, which led to some issues of off-task behavior by the tutees as well as some difficulty in holding the tutees accountable for their practicing. Nonetheless, the tutors also demonstrated a greater motivation to

learn due to their role as a tutor (Webb, 2012). Future research continuing to explore the perceptions of tutors while also examining the perceptions of tutees involved is needed.

Peer mentoring in music was examined qualitatively in Goodrich's (2007) study on peer mentorship in a secondary jazz band ($N = 17$). The purpose of the study was to examine the ways in which peer mentoring contributed to an award-winning high school jazz band. Data were collected through observations of rehearsals, sectionals and concerts. Other ethnographic techniques used were audio and video recordings, formal interviews, collection of artifacts, and informal conversations. The data were later coded based on emergent themes. The author acknowledged the possible bias of his own analysis of the data, which is important to note since he was the only observer.

Five themes regarding peer mentoring emerged from the data. They were, "(a) mentoring from the adult perspective, (b) peer mentoring for musicianship, (c) mentoring in rehearsals, (d) mentoring outside of Jazz Band I rehearsals, and (e) social mentoring" (Goodrich, 2007, p. 101). Of the emergent themes, the last four (peer mentoring for musicianship, mentoring in rehearsals, mentoring outside of rehearsals, and social mentoring) seem the most relevant to this current research. Goodrich (2007) indicated that "mentoring in rehearsals I observed was generally positive" and contributed to the efficiency of rehearsals (p. 104). He also found that students were motivated to help one another outside of rehearsal. The establishment of the mentoring system by the band instructor likely contributed to this motivation among the students, once again indicating the benefits of such a system. Summarizing the findings, Goodrich (2007) stated: "Peer mentoring contributed to the success of this ensemble by aiding in a heightened musical development rate of the students, making rehearsal time more efficient for the director, and by enhancing the social growth of the students" (p. 110). More research is needed to further

understand how mentoring may contribute to social and musical development of students within ensembles.

In a qualitative dissertation, Taylor (2016) studied peer mentoring in music settings. The case study examined the ways in which peer mentoring influenced international students at The International School of Kuala Lumpur (ISKL). The purpose of the study was to examine the ways in which an existing peer mentoring program contributed to the socialization of these students. Students were selected for this mentoring program based on "musical ability, communication and social skills, and relative maturity" (p. 33). As part of their mentoring, the mentors formally tutored middle school students and also informally met with students outside of required tutoring sessions. In addition to observing this program, the researcher sought to understand how students, teachers, and administration felt about peer mentoring.

Participants for the study included middle school and high school instrumental students from ISKL (n = 15), teachers (n = 2), and administrators and counselors (n = 3) at the school. The researcher was also an instrumental instructor at the middle and high school. He used ethnographic techniques such as formal interviews, recording field notes, informal conversations, collecting artifacts and observing rehearsals, concerts, and tutoring sessions. Artifacts included concert programs as well as playing tests from both mentors and mentees, but the bulk of the data collected was from interviews and field notes (Taylor, 2016).

The following themes emerged from the study: informal peer mentoring, administrative awareness, scheduling issues, level of instructor interest, linguistic differences, cultural differences, transience of student body, and transience of the instructors (Taylor, 2016). The researcher found that informal peer mentoring and the transience of the student body to be beneficial aspects, while instructor interest, scheduling issues, and transience of the instructors

seemed to be flaws in the program. Taylor (2016) claimed that the transience of students participating contributed positively to the program because the students were able to focus on their individual relationships in the one-on-one setting. Informal mentoring took place frequently in various observations, and the author found this to be nearly as beneficial as the structured tutoring sessions. One of the flaws mentioned by Taylor was a lack of administrative awareness at the high school due to the small size of the program. This same transience also left newer music faculty members uninterested in the program. Scheduling conflicts among already busy music students at a high-caliber international school provided yet another problem for the program. Cultural and linguistic differences were not strong influencing factors in the mentor/mentee relationships (Taylor, 2016). Future case studies might further explore the factors contributing to the success of well-respected mentoring programs.

Music and Disability Studies

Madsen et al. (1988) examined the effect of music therapy techniques when combined with cross-age tutoring with "special populations" (p. 136). The study was a pretest/posttest experimental design that paired younger students (tutees) with older students (tutors with disabilities). The older participants (tutors) from the study were 16 elementary students with learning and/or behavioral disorders. There were 32 younger students selected from kindergarten classes at the school. These students were selected by having the 32 lowest scores on the *Leon Inventory of Kindergarten Entering Skills* (1984) that measured skills like simple addition, identifying colors, and counting objects (Madsen et al., 1988). Half of these students were paired for the experimental group, and the remaining half were the control group. During the experiment, one student moved, so the participants were reduced to 15 experimental and 15 control members.

The older students were then interviewed about their favorite bands and cassette tapes. They were asked if they would like to help a kindergartener find their own favorite music with the incentive of receiving a musical listening reward. Following these interviews, participants were randomly assigned to their groups. Older subjects were then given the *Leon Kindergarten Entry Skills-Teachers Manual* to independently create strategies to teach their kindergarten tutee. Musical examples were also created by the music therapist to assist with learning colors and the alphabet, but "by the end of the first week, all tutors were using their own strategies and had discontinued using the taped songs" (Madsen et al., 1988, p. 138). These older students were also given the reward of listening to their favorite cassette for five minutes after each tutoring session and were told they could receive their own copy if they completed 12 of the 16 weekly sessions.

Data were collected daily to assess student attitudes using Likert-type, 5-point scales. These scales were given to the tutees by the tutors. Tutors also used the same Likert-type scale to answer how they felt about the day's session. Finally, starting with the 12th session, videotapes were made of each group and shown to 15 graduate and undergraduate music therapy/education students. They were asked to evaluate the groups on an *Osgood-type Semantic Differential Based on Several Attributes* (Madsen et al., 1988).

The results of the study indicated that there were gains for all students (experimental and control) on the *Leon Inventory of Kindergarten Entering Skills* (1984) over the course of the tutoring $t(28) = 2.16$, $p < .05$ (Madsen et al., 1988). More importantly, there were significant differences for the control group on 10 skills while the experimental group showed gains on 24 skills, $t(28) = 11.62$, $p < .01$. To receive a passing grade on any of the tests, a 100% perfect score had to be achieved. Overall, both tutor ($M = 1.3$) and tutee ($M = 1.9$) rated the experiences as very positive (p. 140). Finally, the observations by the collegiate students indicated that the

tutors, while selected due to their behavioral and academic troubles, demonstrated characteristics like being "quite on task, positive, socially appropriate, above grade level, and behaviorally normal" (p. 140). The observers also noted how "physically close and 'loving' each group seemed to be" (p. 140). This research provides evidence that peer tutoring can be beneficial for students with disabilities and that music can be used to help develop relationships between peers. Future research should consider how music influences or effects the interactions between peers.

Johnson and Darrow (1997) studied the inclusive attitudes of public-school band students toward students with disabilities. The purpose of their study was to examine what effect positive inclusion models had on band students' attitudes toward the integration of students with disabilities in their music program. Participants for the study ($N = 757$) were a multitude of band students in elementary ($n = 152$), junior high ($n = 387$) and high school ($n = 218$). Bands from these age groups were randomly assigned to one of four conditions as part of a Solomon Four Group design: (1) pretest-treatment-posttest ($n = 196$), (2) pretest-posttest ($n = 223$), (3) treatment-posttest ($n = 173$), or (4) posttest only ($n = 165$). All groups completed all parts of their condition on the same day. For instance, group one completed their pretest, treatment, and posttest in one class period.

The independent variable for the experiment was a 30-minute video with five segments documenting students with disabilities successfully participating in band rehearsals and performances. The disabilities represented in the video were cognitive, physical, behavioral, and sensory. A researcher-developed questionnaire served as the dependent variable for the project and included the following subscales related to students' attitudes about inclusion: "(a) inclusion of students with disabilities in band, (b) degree of comfort with inclusion, (c) efficiency of the band with students who have a disability, and (d) procedural issues involving students with a

disability in band" (Johnson & Darrow, 1997, p. 173). A panel of three judges who specialize in music therapy, music education, and special education, reviewed the questionnaire. Revisions were made to the questionnaire after this review.

Results from the questionnaire were first analyzed for reliability. Each of the questionnaire's four subscales was examined using Cronbach alpha procedures and gave the following reliability results: inclusion (.86), comfort (.70), efficiency (.78), and procedure (.22). The pretest effects were determined by a 2 x 2 analysis of variance (ANOVA) for the main effects treatment and pretest for total scores. A significant difference was found for the overall treatment scores, $F(1,753) = 133.49$, $p < .001$, but no difference was found for pretest scores. A significant two-way interaction was found between the two main effects, $F(1, 753) = 11.91$, $p = .001$. The test indicated that no significant effects could be attributed to the pretest (Johnson & Darrow, 1997).

A simple factorial ANOVA (2 x 2 x 3) was completed for the four subscales and the main effects treatment condition, gender, and school type. Significant, positive differences were found for the treatment group "for the subscales of inclusion [$F(1, 745) = 111.91$, $p < .001$), comfort [$F(1, 745) = 32.54$, $p < .001$], and efficiency *[F(*1, 745) = 86.16, p< .001]" (Johnson & Darrow, 1997, p. 179). Significant positive differences were also found for females in the study "for the subscales of inclusion *[F(*1, 745) = 16.04, p < .000], comfort *[F(*1, 745) = 21.83, p < .000], and efficiency [$F(1, 745) = 19.34$, $p < .000$]" (p. 179). These data show that the treatment had a positive impact on student views of inclusion efforts while also showing that female students have consistently better attitudes toward inclusive practices.

A follow-up survey was administered to these students six weeks after the initial tests (Johnson & Darrow, 1997). T-tests were used to compare the data from the initial testing and the

follow-up test for the three subscales with good reliability scores: inclusion, comfort, and efficiency. All of the subscales maintained their significant differences when compared to groups with pretest data. Only the efficiency subscale had a significant decrease from initial posttest to the follow-up posttest. However, this follow-up score was still significantly higher than the initial pretest. Because of this, these data show that students maintained these improved attitudes over time. Future research examining how attitudes toward individuals with disabilities and the concept of disability as a whole are impacted by mentoring or tutoring programs is needed.

Self-perceptions of students with disabilities were studied by Darrow et al. (2009). The purpose of the study was to examine the effect of a music mentoring program on attitudes and self-esteem of at-risk students. The participants ($N = 24$) were from an academic program for students involved in conflict at home and at school. All of the participants were young, female adolescents enrolled in a self-contained high school for students with developmental disabilities. The participants were divided into groups that participated in a music mentorship program, a music-only program, or a control group that did not use any musical grouping.

The duration of the study was 16 weeks, and during that time the music mentorship and music-only groups participated in similar activities such as singing in a special chorus, participating in movement activities, playing instruments, and composing music. In addition to these activities, students in the mentoring group served as mentors to students with disabilities and were given instructions and effective strategies for working with these students. Mentors and mentees were also given the task of working towards a collective performance at the end of the 16 weeks. The control group participants were only involved in academics during this time (Darrow et al., 2009).

Four pre- and post-tests were used to assess student self-esteem and attitudes: *Culture-Free Self-Esteem Inventory-3* (Battle, 2005), *Career Choice Assessment*, *Attitudes Toward Persons with Disabilities Assessment*, and the *Linguistic Inquiry and Word Count* (Pennebaker et al., 2007), which "is a text analysis software designed to calculate the degree to which people use different categories of words for the purpose of studying the various emotional, cognitive, and structural components present in individuals' verbal and written samples" (Darrow et al., 2009, p. 8).

The comparison of results from the pre- and post-tests yielded no significant differences in self-esteem for either of the intervention groups. However, there were notable changes on the *Career Choice Assessment*. No students had reported an interest in becoming a teacher prior to the intervention; however, after the experimental period, approximately 30% of the participants indicated a desire to teach (Darrow et al., 2009). Another finding was that students' attitudes towards students with disabilities became more positive at the end of the 16-week period. These results were corroborated by examining the final essays submitted by the participants at the conclusion of the study as measured by the *Linguistic Inquiry and Word Count*. A couple of potential issues with study include non-randomized mentor/mentee pairs and high pre-test self-esteem scores for the mentorship group.

Strategies for Teaching Students with Disabilities in Music

Inclusive practices in an elementary music setting were examined by Jellison et al. (1984). The purpose of the study was to better understand how inclusion practices were shaping social interactions and attitudes between typical and "severely handicapped" students (Jellison et al., p. 243). More specifically, the study examined four things: (a) the frequency and quality of social interactions between these two groups; (b) types of interventions necessary to facilitate

these interactions; (c) acceptance of handicapped students by their nonhandicapped peers in music settings; and (d) comparison of general and music acceptance of handicapped students by their nonhandicapped peers before and after integrated music classroom experiences.

The subjects for the study were 100 elementary students, aged 9 to 12, from four "regular" classrooms and 26 students from five special education classrooms who were considered "severely handicapped" and were between 8 and 15 years old (Jellison et al., 1984, p. 246). The students from the special education classrooms had a variety of disabilities ranging from physical disabilities like being in a wheelchair to cognitive disabilities (not labeled) that meant students were nonverbal or had limited speech and singing capacity. There were no criteria for the selection of the four traditional classrooms other than interest from the teachers and a desire to represent multiple ages and grade levels. There were criteria however, for the special education students to be included in the study. The students were to:

> (a) demonstrate attending eye contact, (b) demonstrate awareness of peers, (c) demonstrate appropriate affect, (d) follow one-part directives, (e) remain seated for 25 min and (f) refrain from disruptive or aggressive behaviors. In addition, students selected reacted positively to music and were able to participate or partially participate in the playing of classroom rhythm instruments. (p. 246)

The 26 special education students were then split up and each of the four music classes added five or six of these students who best matched their age.

The study utilized a multiple baseline design to measure independent and dependent variables. The independent variables were (a) small group and (b) small group with music contingency and the baseline for the study was large group instruction where all students sat in a circle. The small groups were instructed to work collaboratively and include all members to

perform musical tasks and the music contingency groups were given the same instructions but were given a rock music listening reward if they were deemed most cooperative. The dependent variables that were observed were: "(a) social interactions, (b) general acceptance, and (c) acceptance within music" (Jellison et. al., 1984, p. 247). The main focus of the social interaction variable was the frequency at which special education students interacted positively with the students from the regular elementary class (heterogeneous) as well as with fellow students from the special education group (homogenous). Interactions could also be labeled as proximal or isolative, reciprocal or helping, and negative interactions were also recorded. The two acceptance variables were measured through pre- and post-test written questionnaires by Voeltz (1980) and an adapted version of this questionnaire called the acceptance within music scale (AMS) that was created for this study.

Observation protocols were developed by the researchers to code social interactions before, during, and after class as well as during scheduled free time (Jellison et. al. 1984). A five-second observe/record interval method was used for observers to track interactions of one special education student at a time throughout a given observation. This method was repeated for each student after each minute of observation.

The results of the study indicated that "the percentages of positive heterogeneous social interactions were the highest for all grades under the small group music contingency condition and the lowest under the large group condition" during class and free time (Jellison et al., 1984, p. 255). All grades also had a low frequency of social interactions for the large group baseline. Behaviors that were labeled as "helping" were infrequent across all classes while reciprocal behaviors were more common and were higher in all four classes in the small group contingency. For the acceptance variables, all classes saw a significant increase in acceptance attitudes for

both general acceptance and musical acceptance from pre- to post-test. This study demonstrates that simply including students from special education settings in a general music classroom is not the best way to foster positive, heterogeneous social interactions and that reinforcement of specific strategies, like small group instruction, are required to ensure a better educational experience. Jellison et al. (1984) additionally state the small group instruction with a contingency like rock music can serve as a "socializing agent" (p. 258). Future research might further examine the ways in which music education practices help to shape social interactions as well as how students with disabilities experience small group and large group instruction within music classrooms.

Gerrity et al. (2013) also sought to better understand effective strategies for teaching students with disabilities. Their stated purpose was to "identify and define the conditions that facilitate learning in music among students with special needs" (p. 144). The researchers used an explanatory design, which is a sequential mixed-methods design that begins with quantitative data collection and is followed by qualitative data collection to further understand the quantitative data. The quantitative data were collected through pre- and post-test measures that were used to determine students' musical skills and growth. Qualitative data were collected through participant interviews.

The study followed 16 children, ages 7 to 14, as they attended a weekly music program at a Midwestern University. The 10-week program was designed specifically for students with disabilities. The children were accompanied by a parent/guardian as well as a university student mentor. Three special education specialists supervised the university students in their mentor roles. Each week, the children were rotated through instruction in music, theatre, and dance.

According to the researchers, “The music sessions, led by a licensed music therapist and educator, were the most structured components of the experience” (Gerrity et al., 2013, p. 149).

The quantitative measure was a researcher-designed 20-item performance assessment that included items regarding steady beat and pitch discrimination. This pre- and post-test measure was evaluated and validated by two music and special education specialists. The tests were administered and video recorded at the beginning and end of the 10-week period and evaluated by a licensed music educator. The 20-items on the assessment were Likert-type items on a scale of one to five, meaning that students could receive a musical skills score between 20 and 100 (Gerrity et al., 2013).

Semi-structured interviews were conducted with 13 of the 16 children as three were nonverbal and unable to participate in interviews. Separate interview protocols were developed for the parents/guardians and the University Student mentors. Responses to interviews were recorded and later coded into emergent themes. The data were validated through triangulation of child and adult interviews as well as the quantitative data (Gerrity et al., 2013).

The results of the study indicated a pretest musical skills score of 43.0 (SD = 18.9) and a posttest score of 49.7 (SD = 23.4). A paired-samples t-test was used to determine that the difference between these scores was statistically significant, $t(15) = -3.0$, $p = .009$, $d = .87$ (Gerrity et al., 2013). The quantitative data also revealed that students demonstrated increases in skills across all three subject areas found on the assessment: rhythm/duration, pitch, and tonal memory. The qualitative data corroborated these findings, with many students acknowledging their own progress, and parents also expressing surprise that their children could sing. During the interviews, the university students identified effective teaching strategies that may have contributed to this musical growth. These strategies were repetition, student choice, and

increased response time. Additionally, participants indicated that environmental factors such as clear directions and expectations, a behavior plan, and a positive atmosphere, also contributed to the musical growth of the students. While these results did not specifically point out how mentoring may have contributed to the students' success, it identified many pedagogical and environmental elements that contribute to successfully teaching music to students with disabilities.

Another study relating to inclusive practices was an instrumental case study conducted by Salvador (2016). The purpose of this study was to examine how an elementary general music teacher met the learning needs of students with moderate to severe cognitive impairments (CI). These students were taught in an integrated class with their fourth-grade peers and within a self-contained CI class. The participant in this study, Carrie Davis (pseudonym), taught all students at a single elementary school where her teaching duties included K-4 General Classes as well as Young Fives, Cognitive Impairment, and Early Childhood Special Education classes. There were approximately 500 students at this school in an upper middle-class suburb in the Midwest. The researcher observed a 40-minute fourth-grade class and a 25-minute Cognitive Impairment class 10 times each during a 6-week period.

Data were collected primarily through naturalistic observation from the author. Video recordings supplemented these observations and a verbal protocol analysis was used with Ms. Davis for self-reflective thoughts on her teaching. Interviews and journal responses were also utilized for data collection, but a specific number of interviews or journal prompts was not provided. Triangulation, member checks, and peer review were all used to establish trustworthiness of the data. The main emergent themes of this study were: "(1) readiness to teach

exceptional children, (2) inclusive practices in fourth-grade music, and (3) instruction in the self-contained setting" (Salvador, 2016, p. 164).

For the first theme, Ms. Davis indicated that she felt unprepared to teach a self-contained Cognitive Impairment class upon arriving at her school. Salvador (2016) also indicated that "the principal and special educator in this case did not offer any specific requirements, strategies, or advice" (p. 165). The author indicated that this is in contrast to other literature that indicates it is important and helpful for music teachers to attend IEP meetings as well as other planning sessions with special education teachers. Salvador posits that the lack of music experience from Ms. Davis' colleagues may have made for the lack of helpful suggestions.

The theme of inclusive practices related to the two cognitive impairment students who participated in the fourth-grade class (Salvador, 2016). The first student, Zack, received his accommodation through modifications. The main modification that the author listed was the use of color-coded notation along with "melody bells" and the assistance of a musically proficient paraprofessional. The other student, Katie, received accommodation primarily through peer assistance. This manifested primarily in small gestures from her peers, such as pointing at her music to stay on task.

The theme of instruction in the self-contained classroom had two important components (Salvador, 2016). The first was that Ms. Davis chose to use an early childhood approach of musical play from Gordon's Music Learning Theory to facilitate informal learning that encouraged the students to participate voluntarily in their own way. The second component was the musical ability of the paraprofessionals, who were able to encourage participation while participating themselves. These two elements combined to provide an appropriate learning environment for the students with disabilities.

Pinta (2013) conducted a series of qualitative case studies to examine how three students with disabilities functioned in an 18-week guitar curriculum. The three students were from three separate guitar classes led by the researcher at a Los Angeles County high school. Student A was a ninth-grade male student with autism, Student B was a tenth-grade male student with Asperger's syndrome and other behavioral issues, and Student C was a ninth-grade female diagnosed with a learning disability related to auditory processing and expression. All students in the guitar classes were instructed daily, and also received weekly private lessons and assessments that informed future curricular instruction. The data were presented in the dissertation in narrative format, with a week-to-week summary of key events that occurred with each student.

The results of the study indicated that two of the three students were able to successfully complete the 18-week curriculum with assignment modifications. While Student A was not able to complete the full curriculum, he was still able to work on some IEP goals. The researcher indicated that the students had many struggles throughout the course of the 18 weeks, but various modifications to the curriculum throughout the study allowed the students to continue to progress. Accommodation strategies that the researcher found helpful were: slowing the pace of instruction, rewarding good behavior, manual assistance, cooperative learning, and student choice. While these were strategies that the researcher indicated, it is important to note that none of these students liked to socialize with their peers upon being included in the class, and it was not until later in the curriculum that the researcher had success with peers cheering on the participants (Pinta, 2013). More qualitative research is needed to continue to identify effective ways to aid in the inclusion of students with disabilities in the music classroom.

Specific research on peer mentoring students with disabilities in music contexts was conducted by VanWeelden et al. (2017). The purpose of their research was to examine the

effects that a peer mentorship program had on student perceptions of comfort, skill acquisition, and success while working with a peer with disabilities. The research was conducted using a pretest-posttest questionnaire with a 5-point Likert-type scale. Participants ($N = 14$) for the study were students in a large suburban high school choir program in the southeast United States. Two subgroups were created: a mentor group of typically developing students ($n = 7$) and a mentee group of students with disabilities ($n = 7$). The students in the mentee group were identified by both the choral teacher and the exceptional-student education coordinator, and these two individuals also paired the participants into their mentor/mentee groups.

Separate surveys were created for mentors and mentees to answer. The mentor survey included questions that dealt with perceptions of: (a) comfort when working with someone with different abilities; (b) music skill acquisition and teaching ability; and (c) mentee's feelings of success within the ensemble. The mentees answered similar questions that were framed to their role as mentees. It is worth noting that these surveys were not tested for reliability by the researchers, although they did undergo a pilot that did not reveal any problems.

After the administration of the pretest, the mentors met with the choral teacher to discuss strategies for working with individuals with disabilities. Further training was led by the researchers and choral teacher in two 45-minute sessions, during which various activities like role-playing and problem solving were used. Mentees also received a 45-minute training session that included role-playing and discussion. The duration of the meetings between pairings was 12 weeks. During this period, mentors helped their mentees with musical (following the score) and nonmusical (staying on-task) skills. The pairs also met during lunch once per week throughout the study. All pairs kept a journal throughout the study. This, along with the posttest and exit video responses, represented the remainder of the data collection (VanWeelden et al., 2017).

Comparisons between pretests and posttests demonstrated that mentees had slight gains in perceptions of comfort as a result of talking with peers in a school setting while mentors showed no gains. The same trend was found for perceptions of comfort talking with peers within the choral ensemble. Mentees also showed increases in their perceived comfort of receiving assistance from peers in a general school setting while mentors showed a slight decrease in perceived comfort in assisting peers in this setting. However, both groups reported an increase in perceived comfort in assisting or receiving assistance from peers in a choral setting. Results also indicated positive changes for mentee perceptions of the following music skills: eye contact with the conductor, blending with the ensemble, following along with the text and score, and performance etiquette. Mentors showed positive changes in the areas of understanding music terms and following the score (VanWeelden et al., 2017).

Interestingly, the responses indicated negative changes for mentees while mentors' responses indicated positive changes for the following statements, "I was successful in choir", "My peer mentor felt I was successful in choir", "My teacher felt I was successful in choir", and "I would like to continue to have a peer mentor in choir" (VanWeelden et al., 2017, p. 40). These results, along with other responses, indicated a disconnect between mentor and mentee perceptions of success in choir. For the qualitative data, the researchers did not report any specific findings other than a generally "positive" response from the participants (VanWeelden et al., 2017, p. 40). No statistics were reported for the quantitative data due to the small number of participants.

This study is the only known study on mentoring students with disabilities in the music classroom. Although the nuanced distinction between mentoring and tutoring is slight, it is interesting that the results from this study are inconsistent with the literature that peer

learning/mentoring is a good inclusive strategy to use in the music classroom. Further qualitative research is needed to understand the experiences of participants engaged in peer mentoring programs centered on teaching students with disabilities in music contexts.

Summary

This literature review presented a variety of topics that are relevant to the present study. First, general education studies that examined the effects of peer mentoring on both mentors and mentees were presented. These studies revealed that peer mentoring can improve outcomes for mentors and mentees involved in mentoring experiences. Participation in mentoring programs was found to improve social skills and connectedness to school in mentors (Geddes, 2016; Karcher 2009) and mentees (Karcher, 2005). Additionally, mentors can experience improvements in academic achievement when participating in mentoring programs (Karcher et al., 2002). Mentor attitudes toward peers were also found to impact mentee outcomes. Mentors with positive attitudes helped to improve mentee connectedness to school while mentors with negative attitudes had the opposite effect (Karcher et al., 2010). While most of the literature was positive, Rodriguez (2010) did provide evidence that mentoring programs with poor mentor/mentee ratios and mentor attendance issues can be unsuccessful.

The second section detailed in the literature review discussed studies that examined various peer to peer learning strategies in music contexts such as cooperative learning and peer tutoring. Johnson (2011) demonstrated that peer learning was significantly more effective than traditional instruction in improving students' rhythm achievement scores. This contrasts with prior research from Cornacchio (2008) who found that cooperative learning was not more effective than traditional instruction at improving students' composition achievement. Alexander and Dorow (1983) found results that reflect the general education literature on mentor attitudes

(Karcher et al., 2010). They found that tutors who were trained with approval techniques were able to improve their tutees' musical achievement scores. Qualitative research on tutoring and mentoring in music has demonstrated a couple of consistent trends. Studies indicate that informal/social mentoring is a contributing factor to successful mentoring programs (Goodrich, 2007; Taylor, 2016). Additionally, other qualitative research has found that students enjoy the experience/challenge of peer learning (Andrews, 2013), and students who serve as tutors have a greater motivation to learn because of their experience (Webb, 2012). A couple of other facets of mentoring and tutoring programs that arose were that tutors tend to stay in their pedagogical comfort zones (Webb, 2012) and that a lack of administration awareness can be detrimental to a program (Taylor, 2016).

The third section presented research that details student attitudes toward peers with disabilities. Johnson and Darrow (1997) demonstrated that the use of an inclusion training video could improve band students' attitudes toward peers with disabilities. Darrow et al. (2009) demonstrated that a mentoring program could be used to improve student attitudes toward students with disabilities in the music classroom.

The final section presented research on strategies for teaching students with disabilities in the music classroom and peer mentoring students with disabilities in music contexts. Effective strategies for teaching students with disabilities were documented by many researchers. These strategies were: small group peer learning (Jellison et al. 1984); repetition, student choice, and increased response time (Gerrity et al., 2013); peer assistance and instructional modifications (Salvador, 2016); and slowing the pace of instruction, rewarding good behavior, cooperative learning, and student choice (Pinta, 2013). Finally, VanWeelden et al. (2017) found that

mentoring students with disabilities in a high school choir did not improve self-perceptions or attitudes of mentees with disabilities.

Chapter 3: Methodology

In this chapter I describe the method of the present study. This includes information on the purpose of the study, research design, research context, participants, data generation, data analysis, and researcher subjectivity. For the purpose of anonymity of the club sponsors, the pseudonym Alyssa will refer to the orchestra teacher and the pseudonym Colleen will refer to the special education instructor. The high school will be referred to as Creekview High School.

Research Questions and Overview

The purpose of this study is to examine an extant chapter of the United Sound program, an organization that provides "musical performance experiences for students with special needs through peer mentorship" (United Sound, 2016a), to understand how it impacts participants' perceptions of one another, the perceived benefits for participants, and the factors contributing to the program's success. As such, the following research questions will guide this study:

(1) How do participants describe their views of one another?

(2) What do students perceive to be benefits of the peer mentoring program?

(3) What factors contribute to the success of this mentoring program?

Design

I used a case study design to understand the mentoring program from multiple angles. According to Merriam (1998), the case study must be an object or program with clearly defined bounds. Case studies in education are often used to study programs like these so long as they are clearly defined objects of study, separated from other social systems (Merriam, 1998). Furthermore, Merriam (1998) explains that case studies are especially useful for those interested in process. She states, "By concentrating on a single phenomenon or entity (the case), the researcher aims to uncover the interaction of significant factors characteristic of the

phenomenon" (p. 29). This aligns well with the purpose of this study: to better understand how students perceive both their peers and the mentoring program itself. A particularistic case study design will be used to study this mentoring program. A particularistic case study is defined as focusing on a "particular situation, event, program, or phenomenon" (Merriam, 1998, p. 29). Since I am interested in both the unique aspect of student understanding as well as this specific mentoring program, the case study design will help to provide rich, meaningful data on the program.

The mentoring program I studied is part of a national nonprofit organization called United Sound, Inc. According to the United Sound website, the program is:

> A school-based instrumental music club for individuals with intellectual or developmental disabilities and their typical peers. Dedicated to promoting social involvement through shared ensemble performance experience, United Sound joins students with and without disabilities to learn and perform in the band or orchestra together. (United Sound, 2016a)

This mission of promoting social involvement is accomplished through United Sound's partnership with individual schools. There are currently 135 chapters in 29 states nationwide that range from middle school through college (United Sound, 2016b). Once a chapter is established, United Sound provides training to band/orchestra and special education teachers so that they can establish a mentoring program at their own school. United Sound also provides financial and organizational resources to these individual schools. Once the program is established, mentor groups are formed with student volunteers from music classes and students with disabilities from a special education class or program. The student volunteers serve as mentors, and the students with disabilities are called new musicians. Groups work throughout the year with the goal being

to include the new musicians in a "full instrumental support ensemble" performance (United Sound, 2016a). Qualitative research methods will be employed to gather data on student perceptions of the mentoring program through observations and participant interviews. Qualitative researchers are concerned with understanding how others view the world, so using these forms of data collection will adequately serve the purpose of this study (Merriam, 1998).

Research Context

Creekview High School, a public school, is a member of United Sound and is located in a large suburb in a midwestern state. The high school students are predominantly white (77%) and Asian (12%). Other racial and ethnic identities such as black and Hispanic are all below 5% representation. The school is in an upper-middle class suburb with only 9% of the student population qualifying for free and reduced lunch. The median income for households in this suburb is over $109,000, nearly double the national average of approximately $60,000.

The school was selected since it is one of four secondary schools participating in the United Sound program in the state. The school was also selected because of its award-winning orchestra program and history with United Sound; they were one of the first two schools in the country to pilot United Sound for orchestra. The mentoring program has been established for many years at Creekview and has upwards of 60 students participating each year. Additionally, two of the four potential sites were within immediate driving distance of the researcher's institution. Creekview was chosen from the two because this program meets after school while the alternate school meets during school hours, which would not have been possible for me to observe. The location and nature of a strong program provide ample reason to study the mentoring program and its influence at Creekview.

At Creekview High School, the mentoring program operates as a weekly, after-school meeting between orchestra students and students from the school's special needs program. Orchestra students from grades 10-12 apply to become mentors through online applications created by the orchestra director. The mentees are students that are recommended by a special needs teacher and are students with a variety of physical and cognitive disabilities with little to no prior experience with music. Mentors and mentees are placed in mentoring groups of three to four mentors and one mentee ("new musician") that meet for 45 minutes each week. These meetings serve as an opportunity for the mentors to assist these new musicians in developing their musical skills.

The club is co-sponsored by an orchestra teacher and a special needs teacher. Depending on the needs of the students there are sometimes paraprofessionals present at these after-school mentoring sessions to observe and assist the mentoring groups when necessary. Both the teachers and the paraprofessionals assist mentor groups when necessary at club meetings. There was not a need for paraprofessionals this year, as the new musicians who participated were capable of functioning on their own or with the assistance of Colleen, the special education teacher.

Participant Recruitment

The size of this United Sound club varies from year to year, but a high-end number in recent years was nearly 60 students. Therefore, this study accounted for the possibility of all students returning consent/assent forms. Any and all complete mentor groups were to be observed to better understand the structure and inner workings of club meetings. A total of three complete groups and two teachers returned forms ($N = 14$). To better focus interviews and data analysis, I chose only to interview two complete mentor groups ($n = 8$). The criteria of gender, age, grade, and instrument were used to select the two groups for interviews. This helped to

ensure that these two groups created a fair representation of the entire United Sound club. The third group was still able to be observed on two occasions. I did not observe this third group during the third visit because their new musician was absent.

Recruitment of teachers began via email after approval from IRB. A recruitment email was sent to the club sponsor, Alyssa, who was asked to pass along information to her co-sponsor in the special needs program as well as paraprofessionals, if any, who were involved with their students at club meetings. The email detailed information about study procedures and also included attachments of informed consent documents.

Recruitment of student participants (mentors and mentees) occurred through distribution of physical copies of parental/guardian consent forms and student assent forms. These forms were distributed by one of the club cosponsors in a place and time that was least disruptive to their classrooms and meetings. The club sponsors were asked to pass along recruitment materials that detailed the procedures in the study and included informed consent documents for parents/guardians as well as assent forms for students. The emails gave a brief overview of the study, and the consent/assent documents contained all necessary information about the study, who to contact with questions, and all of the elements of informed consent. It was made clear to all student participants that they were required to return a signed parental consent form as well as their own assent form in order to participate.

All participants (teachers, mentors, and mentees) were given three mentoring sessions from the time of receiving recruitment information to return forms. Only students who provided their parental consent forms could assent to participate in this study. If one student in a particular mentor/mentee group did not return a form, or declined to participate, that group was not observed or interviewed.

Participants

To be considered a participant in this study, students had to be members of the United Sound club at Creekview High School and needed to be fluent in English. Adult subjects were the club sponsors who serve in advisory roles during mentoring meetings and were also required to be fluent in English. Individuals who could not communicate in English were not asked to participate.

Alyssa is an orchestra teacher at Creekview High School and is one of the club sponsors for this chapter of United Sound. This is her fourth year as the club sponsor, which requires a lot of organizational work. She is in charge of organizing transportation for all events, communicating with parents, and helping at meetings when needed. She teaches many of the mentors how to arrange music for their new musicians, so that mentors can have more ownership of their instruction and so the music is more adequately adapted to each new musician's needs. Alyssa plays the violin and occasionally uses it during meetings to assist with full group playing, especially in the meetings leading up to a concert or performance. Over the years, she feels that she has allowed students to have more control over the club. Her favorite part of United Sound is seeing the smiles of the new musicians when they are done performing. Prior to becoming an orchestra teacher, Alyssa spent one year working at a clinic for children with autism.

Colleen is a special education teacher at Creekview High School and is the other club sponsor for this chapter of United Sound. This is her sixth year with the program, and she was there when United Sound was first established at Creekview. She also sponsors a Best Buddies club at Creekview, which is another peer to peer program that pairs some of her special education students with other students throughout the school. At United Sound meetings, she will typically float around and assist as needed, but she generally feels that the mentors have

everything under control. In one of her interviews, she indicated that she does help with training the mentors at the beginning of the school year by explaining the specific disabilities of each new musician and how to best help them. She does not generally attend concerts or other United Sound sponsored events.

Steve is one of three new musicians who participated in this study. He is a sixth-year senior and has been with the group since its inception. Steve is full of energy and can often be observed telling jokes or singing to his mentors. As a veteran member of the group, he was given the privilege of being New Musician Co-President this year. In this role, he assists the other students in leadership positions by coming up with various social/icebreaker activities to do before meetings and brainstorming other ways to improve the group. Steve plays the violin and is one of the more advanced new musicians in the group. He was the only new musician that I observed who was reading from sheet music instead of the graphic notation found in their United Sound method book.

Rebecca, one of Steve's mentors, is a junior at Creekview High School who is in her second year in United Sound. This is her first year working with Steve since she had a different new musician during her first year. She is a first-chair violist in the Sinfonia orchestra at school, and she indicated that she enjoys the passion and love for music that the other members of the orchestra have. Rebecca indicated that she initially got involved with United Sound so that she could be more involved with orchestra. Her new musician and she get along really well, and they enjoy each other's company. The mentoring group as a whole also has good camaraderie. She does not have a leadership role in United Sound.

Another one of Steve's mentors is Jennifer. She is a senior at Creekview High School and is in her third year with United Sound. Like her new musician Steve, she is a violinist, and she

also plays in the Symphony Orchestra. She has played the violin since fifth grade and also started the piano when she was in kindergarten. As the only violinist in this mentor group, her fellow mentors rely on her for specific information related to teaching the violin. This is her third year in United Sound, but this is her first year working with Steve. However, she did work with Rebecca in a different mentor group last year. Jennifer also indicated that she has never worked with the same new musician twice. Her interest in United Sound stemmed from her lifelong interest in music, and she felt that joining United Sound would be an opportunity to share this love of music with others.

The final mentor in Steve's group is Christina. This is Christina's second year in United Sound and also her second year working with Steve. Her interest in joining United Sound came from the encouragement of a friend. After one year in the club, she applied for Vice President, but was instead offered a position as Activities Coordinator based on ideas she presented during her interview. As Activities Coordinator, Christina is in charge of leading social activities at the beginning of each meeting. She felt that mentor groups were too isolated during previous years, and she felt everyone in the group could do a better job getting to know everyone's name. Christina is a cellist in the Symphony Orchestra at Creekview High School and is currently enrolled as a junior. During one of her interviews, she told me that orchestra felt very different this year since many of her friends from the cello section had graduated during the previous school year.

The other mentor group that was interviewed was Sarah's. Sarah, a new musician, is in her fourth and final year in United Sound and does not have a leadership role. Her family was the reason that she joined United Sound. She plays the violin and really enjoys the company of her mentors and considers them friends. During my first visit, I experienced her friendliness first-

hand as she came up to hug me upon my arrival. Sarah's ability to communicate was often limited to just a few words, so interview questions were adjusted to accommodate her speaking ability. Her violin playing is also in the early stages of development, and her parts are often limited to open string notes. One of her goals for this year was to begin putting down a finger on each string during performances. Her favorite part about United Sound is their meetings every Monday.

One of Sarah's mentors is Abby, a senior at Creekview who is in her second year with United Sound. This is also her second year being Sarah's mentor, and she does not have a leadership role in the club. Abby plays violin in the top orchestra, Philharmonic, at Creekview and has been in that orchestra for three years. She feels the "Phil" is a welcoming place and that she has a role as "section mom," organizing outings and activities for the violins. She originally became involved with United Sound because she felt it would be a fulfilling experience.

Another one of Sarah's mentors is Megan, a junior at Creekview High School. This is Megan's first year with the group, but she has fallen in love with it so quickly that she plans to continue to help after school even after she transfers to a new school next year. Megan is a cellist in the Philharmonic Orchestra at Creekview and often relies on her fellow mentors for violin advice. In her mentor group, she is quite socially connected with Sarah, in and out of meetings. They follow each other on social media and spend time texting each other outside of meetings. She originally joined United Sound so she could share the enjoyment of music with others.

Sarah's final mentor is Layla, a senior at Creekview who is serving as Senior Co-President. This is Layla's third year in United Sound. To be selected as a Senior Co-President, you must previously serve as Junior President, a position which the outgoing president hand selects. In her role as Senior Co-President, Layla has many responsibilities, including posting

fliers, communicating with parents, and setting up social media for the club. She was inspired to join United Sound after seeing the club perform live when she was a freshman. Layla plays the violin in the Sinfonia Orchestra at Creekview and finds it to be a fun and social orchestra experience. She also enjoys being able to pass on her violin knowledge to her new musician, Sarah.

The final mentor group that participated was Ana's. Due to time constraints, this group was only observed and not interviewed. Therefore, I do not have the depth of information on this group that I do for the previous two groups. From my observations I know that Ana was a very shy and timid new musician, and her mentors consistently encouraged her in order to motivate her to play her violin. Ana's mentors were Emma, Katie, and Kim. It is important to note that all participants except Steve were female.

Data Generation

Interviews, observations, and documents are the three main sources of this qualitative data within case study research (Merriam, 1998). In this study, observation and semi-structured interviews were used as the primary forms of data generation. A list of interview questions can be found in Appendices A-C. According to Froehlich and Frierson-Campbell (2013), observation is defined as "deliberately viewing and listening to human action and interaction in the context of a research study" (p. 169). In this study, observations will focus on the mentoring sessions.

Three observations of 45-minute mentoring sessions took place over the course of the fall 2019 school semester. These observations were video and audio recorded for later analysis. In order to better understand how the mentoring events flowed, one observation took place before the first interview. At this meeting, I discovered that members of United Sound participated in a social activity for 15-20 minutes at the beginning of each meeting. Since this activity included

members who had not returned consent forms, I had to wait to begin my observations until the conclusion of the social activity. The remaining observations were scheduled at three-week intervals. During these observations, I only observed the mentor groups once they separated into their individual groups in order to respect privacy.

Merriam (1998) indicates that interviews are necessary when trying to ascertain information that is not easily observable. Therefore, the interviews with participants shed light or provide more context for things that occurred during observation. For this study, I chose to use semi-structured interviews. According to Merriam, "The problem with using a highly structured interview in qualitative research is that rigidly adhering to predetermined questions may not allow you to access participants' perspectives and understandings of the world" (p. 74). Unstructured or informal interviews are an alternative to highly structured interviews and are often used to generate more structured questions for later interviews (Merriam, 1998). Since the purpose of this study was to better understand how this mentoring program shapes student perceptions of both the program and their peers, it was best to utilize a method of interviewing that allowed for flexibility in discerning these perceptions while still maintaining a focus on the purpose of the study. As such, I developed interview questions with consultation from qualitative research experts in the field of music education and through referencing numerous interviewing resources (Holstein & Gubrium, 1995; Merriam, 1998; Roulston, 2010). Through the use of semi-structured interviews, I created an account of the students' own understandings about the mentoring program and their relationships with their peers.

This semi-structured format was also important during interviews with the new musicians. I did not have prior experience interviewing students with disabilities, so the ability to adapt my questions to fit the needs of an individual student was crucial for adequate data

collection. Prior to interviewing the new musicians, I consulted with the special education teacher Colleen in order to ensure that my questions fit the cognitive ability of her students. I adjusted the questions as needed for each of the new musicians that I interviewed (Appendix C). Steve's questions required minimal adaptation while Sarah's questions required modifying language to account for one word or choice-based responses.

Over the course of the study, I conducted two interviews with each of the participants (*n* = 10). Interview participants included the faculty sponsors for the club and two complete student mentoring groups. Each mentor group had three mentors and one new musician. Following the second observation, one 15-minute interview was conducted with each of these 10 participants. During this interview, I gathered an understanding of participant perceptions early in the mentoring process. To collect additional data, and follow up on data gathered from the first interview, a second 15-minute interview with each of these 10 participants was also conducted after the third and final observation. Interviews were audio recorded so that they could be analyzed later. The interviews took place at school away from other students but in the presence of other adults to make sure each student was comfortable. In order to help maintain privacy, pseudonyms are used throughout this study.

To respect the integrity of the participants, member checks were used to present my interpretations of the data to participants. Froehlich and Frierson-Campbell (2013) explain that the first step in completing member checks "is to provide the transcript of an interview or observation to the participant(s) described in those transcripts" (p. 164). This may be followed up by asking the participants for feedback on the transcript. After the completion of the observations and interviews, I shared the interview analysis with participants in order to ensure that

participant thoughts from their interviews are accurately represented. The participants did not request any changes in their transcripts.

Data Analysis

All interviews were transcribed for later analysis, and observations were analyzed and recorded in my researcher journal. I wrote labels that corresponded with my initial thoughts on various aspects of the raw data. This is consistent with recommendations by Froehlich and Frierson-Campbell (2013) that words, lines, or paragraphs are chosen as specific units for initial labeling. Memos were also used after each of the live and recorded observations. Memos are defined as "notes, written after and separate from data collection instances" (p. 175). In addition to written memos, I also recorded voice memos on my phone to explain my reactions from my observations immediately after they happened. These memos guided not only my data analysis, but data collection in subsequent observations and analyses. Finally, at the conclusion of the data collection period, all labels were formally coded and examined for emergent themes.

Researcher Subjectivity

As an observer in the field, I acknowledged my own biases and took notes using the required "*narrative accuracy"* (emphasis original) that reflect my own personal thoughts at the time (Froehlich and Frierson-Campbell, 2013, p. 170). My verbal memos allowed me to recognize my own bias more thoroughly by listening to my immediate thoughts following my observation. I was then able to compare my own personal observations with the interviews of students and recorded video of the mentoring sessions that I observed to see if there were differences in the narrative I had created in my researcher journal. Additionally, I have my own experience participating in a mentoring program as both a mentor and a mentee. Although the program was not centered around students with disabilities, it still shapes my perceptions of

successful mentoring programs. Finally, my enrollment in an inclusive teaching course during my undergraduate studies helped to shape my own understanding of individuals with disabilities. Throughout the study, I made conscious efforts to understand how my own prior experiences shaped my interpretations of interviews and observations.

Chapter 4: Results

In this chapter, I discuss the analysis of data collected through interviews and observations. The data were coded and analyzed according to the research questions:

(1) How do participants describe their views of one another?

(2) What do students perceive to be benefits of the peer mentoring program?

(3) What factors contribute to the success of this mentoring program?

Emergent themes are presented with their corresponding research questions below.

Research Question 1: How do participants describe their views of one another?

The overwhelming response from mentors, new musicians, and teachers was that everyone in the United Sound Club gets along really well. The trend of responses from the new musicians was that they perceive their mentors as being nice, helpful, and even as their friends. The responses from mentors indicated that this friendship theme was reciprocal. Two additional themes emerged in regard to how individuals perceive disability. The first theme was a sense of discomfort from the mentors when describing or discussing disability, and the second theme was a shift in mentality from the two teachers involved with the program.

The first theme identified for this question was that of friendship and positive views of positive views of participants toward one another. The two new musicians who were interviewed both had positive things to say about their mentors. When describing his mentors, Steve explained: “Christina’s really nice and [so] is Rebecca and Jennifer . . . [I like] their personality.” Sarah corroborates these feelings by stating that she is “sad” when one of her mentors is absent and also noted, “I like Megan” (her mentor). My observation that there was great joy on Sarah’s face when her mentors arrive at the United Sound meetings confirms her statements. The orchestra teacher, Alyssa, also cited an instance when new musicians displayed affection for

their mentors, sharing: “One of the new musicians has written poetry about her experience in the club. . . . She shared that with me, but she shared it with her group first.”

Likewise, the mentors in these groups made positive comments about their new musicians. Megan had the following to say about her new musician, Sarah: “She’s awesome. Like, I just wanna start out saying, she is awesome. . . . When she sees me in the hallway, she’ll like yell and get excited and run up and give me a hug, and it, like, brightens my day.” Similarly, another mentor in her group, Abby, said this about Sarah: “She’s just, like, a very happy and welcoming person.” Like Sarah’s group, the mentors in Steve’s group also had praise for their new musician. Rebecca described Steve as “a very energetic person, whatever he does there’s lots of energy in it. I don’t think he ever runs out, which is pretty great. Umm, he’s very social, he loves all of his friends.” Likewise, Christina spoke highly of Steve by saying, “Steve is pretty mature. He is definitely on a high level of playing.”

Many students elaborated on these thoughts and went so far as to describe themselves as friends with their new musician or mentors. In explaining what she liked best about a recent United Sound sponsored performance at Bands of America Grand Nationals, the following exchange occurred with Sarah:

Researcher: Was it fun?

Sarah: Yeah

Researcher: What was fun?

Sarah: My friends.

Researcher: Your friends?

Sarah: Yeah

Researcher: So, would you say that your mentor group is your friends?

Sarah: Yeah

Steve also elaborated on this idea of friendship when he described his mentors as "pretty helpful and caring, [there is] kindness and friendship and lots of unity."

The mentors also described these relationships as friendships; for example, explaining her relationship with her new musician Sarah, Abby stated:

> And as we've gotten closer through the past year, umm, it's been really fun just seeing her, and she's one of my close friends now and we see each other in the hallway and she like runs up to me and it's nice.

Jennifer also expressed the idea of friendship when discussing all of the new musicians: "I see them as friends now, like, I don't see them as they're on a different level, but I see them as equal." The idea of being on the same level as their new musician was not unique to Jennifer. Christina described how her relationship with Steve has grown with time, and how her perceptions had changed:

> I'd definitely gotten closer with him, I had a better understanding of who he is as a person, ya know, how he does things. And this year, definitely, I've gotten to know him, like even better. And umm, I think now that he's an officer too, umm how would you put it? It's just like a different type of relationship sort of thing ya know? I'm not just mentoring him. . . . We're on the same level ya know? We're all on the same level sort of thing.

My own observations also provide evidence of an atmosphere that allows friendships to develop. During each visit, I noticed that mentor groups did not start with playing and practicing. Rather, the first three minutes was generally set aside for mentors to socialize with their new musicians. Steve's group embodied this well, and on my second visit, I recorded that Steve's group took

about ten minutes to stop socializing and begin consistently practicing the violin. In this scenario, the mentors were eager to begin practicing, but were patient with Steve as he shared his excitement for the song *Big Rock Candy Mountain* as well as his desire to one day perform for a Toronto Maple Leafs hockey game. These examples help to demonstrate that mentors' and new musicians' perceptions of one another are deeper than surface-level compliments. The students feel that they have bonded with one another and made friendships across mentor/mentee lines.

A second theme that emerged was discomfort with disability. While students described each other in very positive terms on an individual level, they struggled to adequately describe their perceptions of individuals with disabilities more broadly. There were many students who displayed visual discomfort when asked about disability during their interviews, and some responses reflect this general sense of unease. For instance, Rebecca immediately responded to a question about her definition of disability with this statement: "That's kinda a loaded question there." Jennifer struggled with the word disability as well and had many pauses while trying to come up with a definition. She said, "Hmmm (pause) I'm not really sure, just (pause) Mmmm (pause) maybe just someone who might need a little more help in performing certain tasks." Abby also indicated that she did not like the word disability itself, stating, "I think it has a really negative connotation too, to say someone's disabled."

There may have also been some confusion around the word disability in the first place. The students may have been more accustomed to the phrase "special needs" or were simply unsure as to what constitutes a disability. For instance, Abby said, "Yeah I have two cousins who are on the spectrum. They're undiagnosed." Her certainty that her cousins are on the autism spectrum, while also claiming that they are undiagnosed, indicates that she may not fully grasp what it means to be medically diagnosed with a disability. Rebecca had a similarly confusing

statement when responding to a question about prior experiences with individuals with disabilities:

> Not [students] with disabilities, but I do work with a lot of students, 'cause I'm going to work after this. I work at [name of tutoring center], so it's like a lot o' different kids. And like some of the kids have learning disabilities, but not all of them. Some of the younger ones.

Her initial response was to say no, she hadn't worked with individuals with disabilities, but later in the same sentence, she states that some of the students at the tutoring center have learning disabilities. Her distinction between a disability and learning disability may be part of what confused students when responding to these questions. I asked her to clarify this statement during her second interview, and she indicated that the students whom she had previously labeled as learning disabled, were actually not categorized that way by the school:

> Yeah, so a lot of them, I wouldn't say a lot, maybe like a good 10% of the students, they join [the tutoring center] because their parents are worried that, umm, in school they're not getting the specific attention they need. Because they're having, ya know, trouble catching up, and the school doesn't I guess qualify them as like an actual special needs student, so, like, they're struggling but they're not with the class, but they're not with the other special needs kids, so they're kinda like in the middle here.

Discomfort with the word disability is also evident in students' attempts to minimize the label of disability altogether. For instance, Layla was hesitant even to call the new musicians disabled when she explained the following:

> I don't see any of them as really disabled. I think they're maybe just a little slower in understanding how to do things. . . . all of them are *very* capable of playing the same music that we're able to play. It's just taking them a little bit longer to get there.

Christina also tried to minimize the label of disability by focusing on the humanity of her new musician:

> I do not think disabilities define one's ability to be human. I think umm, it might make certain things more difficult for one to do, like, walk or talk or something like that, but they are still people just like us and they can comprehend things just like us.

Christina's response highlights her desire to portray the new musicians as people first, while also including that new musicians may need slightly longer to perform certain tasks.

Another theme that emerged was that both teachers indicated a positive shift in how they perceive students with disabilities as a result of United Sound. Alyssa mentioned that she worked for a clinic for children with autism before finding her first teaching job. Even with prior experience interacting with students with disabilities, Alyssa indicated that United Sound helped to remind her of what the new musicians could accomplish. She said it makes "[me] check my expectations, of like, what kids can and can't do . . . I generally have pretty healthy expectations. It's just, like, a good reminder to stay like, open-minded all the time." Colleen, the special education teacher, even indicated that the program helped shift her expectations: "Yeah, I guess I feel like there's no limit to what they can do. You know, I never thought any of my students would ever be playing violin and a cello . . . I think it's been great." Even though Colleen has taught the new musicians in her special education classroom for many years, she was still shocked to see what they could accomplish musically.

Research Question 2: What do students perceive to be benefits of the peer mentoring program?

Students indicated a variety of ways in which the program benefits them academically, musically, and socially. Of the students who were interviewed, a few themes emerged that were common amongst this group. These perceived benefits can be summed up in the following themes: interpersonal skills, pedagogical awareness, and fun/impactful musical experience.

During the interviews, there was a trend amongst mentors to describe ways in which they had gained interpersonal skills from their time in United Sound. The first interpersonal skill they mentioned was a sense of teamwork that developed while working with their mentor group. When describing her own personal growth, Jennifer said, "I feel like I've gotten better at collaborating with people. . . . I'm usually pretty reserved and I think working with [the other mentors] to teach Steve more about music has helped me grow a little bit." Christina had a similar description for the way United Sound has impacted her:

> It's definitely helped me with, like, working on group projects and stuff, cuz like normally I feel like I would have just taken the lead, and be like, "You do this, you do that." Cuz like, I'm worried, I don't want my grade to suffer, cuz I'm grade focused. But working with them shows me that I should probably have more trust in people, that they can actually pull their weight and that everybody. Like, I don't need to be bossing people, like people know what to do.

Christina's thoughts about working in groups were echoed by Megan:

> It's helped me learn team building skills because, I mean, as you may know, it's difficult sometimes. It's a lot of work when, maybe, a student doesn't wanna cooperate or they're not really having a very good day and umm, I've had students, like,

> throw instruments or like, just not be very happy. So it takes a lot of patience and a lot of teamwork.

Working through such difficult situations as well as being around other mentors helped these students gain a sense of teamwork from this mentoring program. Through these collaborative efforts, the mentors also indicated developing another interpersonal skill: social interaction.

Developing interpersonal skills in groups was often described by mentors as growing closer to their new musicians over time. This was in large part due to the time they had to socially interact at the beginning of meetings, as well as out-of-rehearsal interactions. For instance, Layla has mentored Sarah for two and a half years, and she explained how the relationship has developed both in and out of United Sound:

> Sophomore year, since I wasn't helping her as much as I am now, umm, we were kind of strangers. But, seeing as, junior year, I was the only one she was familiar with, from the previous year, we got a little closer, and we keep on getting closer. . . . Like, if we see each other in the hallway, we'll have a little conversation, umm she texts me every once in a while like, "Hi, how are you, how was your day?" So we have like, we see each other outside of school, and we still like talk. And she follows me [on social media]; I follow her, so we're still like, updated on each other's lives, Instagram-wise.

Megan, another one of Sarah's mentors, also said that she has grown closer to Sarah outside of meetings:

> We've gotten a lot closer. Every time I come into theater she's like, "You ready for United Sound?" and I'm like, "Heck yeah I'm ready for United Sound!" Umm. And the concert last week, I actually got to meet her parents, and so, that was really cool because I got to kinda get more involved in her home life. And, umm, I started

> walking her to her car every day after United Sound to make sure she got in the right place, and I say hi to her parents now. And, we're a lot closer now than we were, and I feel like she trusts me a lot more. She texts me a lot, asks me for donuts.

One of the club sponsors, Colleen confirmed these claims by describing how her special education students benefit from the program, "Oh just that they've gotten more, more connection to the general ed group. And you'll see them talking to more kids in the halls because of it. I just think it gives them confidence." The benefits of socializing across mentor/mentee boundaries are fully realized in an anecdote from Rebecca:

> Like if I see someone now with like mental disability say at like Kroger or something then like, it's very different because I'm not gonna be like, "Oh let me find someone" to help them if they're struggling. It's like, I can do this for you, like, I can help you if you need it. Oh this actually happened one time. . . . I was walking through the freshman center before school started. Since it was like orientation, where we like get our schedules and stuff and so, this one girl she needed help with her locker and like, umm she couldn't speak very well, and so she was like, she was struggling and I like, saw her struggle for maybe like 3 minutes and then I went up to her I was like, "Do you need some help?" And she was like, she kinda like nodded yes, nodded no. And then I closed it, and I showed her how to do it, and then she did it for me, and it was just like this moment of like, I just helped someone do this. And I think that's really great. So yeah, and I think everyone should know that.

While the student who Rebecca helped was not a member of United Sound, her anecdote demonstrates how she felt more comfortable interacting with students with disabilities outside of United Sound.

In addition to interpersonal skills, mentors described a better understanding of their teaching because of their time in United Sound. This theme was labeled as pedagogical awareness. Layla described how working with her new musician gave her a new understanding of the importance of fundamentals and slow practice:

> I see like, when we're working with Sarah we often do, like, we pause, we take it very slow first when we're first looking at the music and we clap and we count and we do all that. And I've seen how it really does help her.

Additionally, she indicated that her pedagogical understanding came from activities that normally take place in her orchestra class. Layla said:

> The orchestra directors always told us, "Oh, you should go slow, clap and count" and I'm like, "Nah, I'll just take it at my own pace, I'll do whatever." And then seeing it help Sarah I was like, oh, it probably really does help, so I should probably try it. So now I try it, I hash my music just like we hash hers. Umm, take it slow just like she does, and it's helped me, I think.

The application of strategies from orchestra class was mentioned by others as well. Megan felt that her orchestra teacher's advice was relevant to how she listens when she teaches:

> Well, Ms. Smith always tells us, umm, "Pay attention to other sections, look at other people, and don't just focus on yourself and stop being in your bubble." . . . So, when I get my cello out and play with Sarah, it's, I'm paying attention to her, I'm not paying attention to what I'm playing.

One final mentor indicated that she felt some of her teaching strategies came directly from her orchestra teacher. Jennifer said, "I think I have a better understanding for teaching someone else,

but teaching strategies, umm, I feel like I take a lot from just how Mr. Johnson conducts too in our class."

In addition to feeling able to utilize skills from orchestra class, mentors also indicated realizing that their new musicians learn differently than themselves. Rebecca described a scenario where she assisted her new musician, Steve, in a way that was not the way she would accomplish the same task herself:

> I just learn to, like, figure out there's more than one way to do it. Like today we were clapping and Steve was singing and clapping, which is something we like never do in class, in orchestra. . . . But I think it just shows that there's not always one set way.

Another mentor, Layla, explained how working with mentors who played different instruments influenced her perceptions. She said that United Sound has "definitely opened my eyes as to how you can approach the same problem [differently]."

The final theme that arose from this research question was that participants felt that being a member of United Sound was both fun and meaningful. Over half of the participants indicated that performing at the concerts was their favorite part of being in United Sound, and many elaborated on why this was their favorite part. Abby explained why she felt the performances were so meaningful: "Specifically at the end, when we play the last note and we just kinda look at each other, especially Sarah, she has the biggest smile on her face at the end, and she's just laughing and clapping." Megan echoed this sentiment:

> I really like the concerts where we're all playing together, cuz like, just seeing them finish the song, and, ya know, realizing how much of a good job they'd done and just like seeing them like really happy cuz they've worked so hard. And ya know, they play the concert and everybody's like standing up and clapping for them. And seeing them happy

> makes me really happy because I'm like, "I helped them." Ya know, we did this together and it makes me really happy.

Alyssa, the orchestra teacher, feels similarly to her students: "I guess another best part is getting to watch, in the performances, the end, and getting to see their faces at the end and all the smiles." She continued to explain how meaningful the performances were: "And so many of their performances have ended with standing ovation, and those are special moments to get to see how happy they are and what effect their music-making has had on this audience."

In addition to finding it meaningful to bring a smile to their new musicians' faces, mentors also felt that participating in the group was more fun than their typical orchestra experience. Abby explained the difference between her time in Philharmonic orchestra and United Sound like this: "I think Phil's obviously like a lot more strict with everything, umm, but United Sound, it's a lot more fun, and kind of relaxing in a way." Megan described United Sound as "a lot less stressful because it doesn't matter if really you mess up. Umm, and you're just there to have fun, whereas in orchestra I kind of get stressed during concerts." Once again, their teacher, Alyssa, corroborated their sentiment: "I think that another thing that they gain is umm, just sharing the love of music in a . . . way that's completely not competitive or like, driven. It's just joyful rather than competitive."

Research Question 3: What factors contribute to the success of this mentoring program?

Several themes emerged that indicate aspects of this mentoring program that help contribute to its success. These themes included effective teaching strategies, informal mentoring, and having a common goal. All three of these themes emerged from both my personal observations, and interviews with mentors, new musicians, and teachers.

During the course of data collection, I observed several instances of effective teaching and patience from the mentors. This was consistent across the three mentoring groups that I observed. The bulk of the effective teaching strategies that I observed fall into two categories: positive reinforcement and responding to the needs of the new musician.

I consistently noted in both my researcher journal and in my post-observation recordings that positive reinforcement, high fives, and praise were common across all three groups. On a few occasions, these praises would come when the student did not quite do what was asked, but more often than not, it was praise that was earned by the new musician. The special education teacher Colleen mentioned that she had observed the occasional excessive amount of praise from the mentors but points out that there is perhaps no such thing. She said that she thought praise could "maybe not go so far, but I don't know if there's such a thing as that, but they are sooo complimentary to the kids." Colleen's observations help further demonstrate the prevalence of positive reinforcement in the club, but they do not quite explain where this teaching strategy comes from.

Five of the six mentors cited the training videos as the origin for their conscious use of positive reinforcement. For instance, Rebecca indicated that the video "gives examples of like, make sure you always are positive. Like, you never wanna say anything negative, because sometimes that can be kinda hurtful." Abby echoed this sentiment, stating:

> But in the training video they really emphasize like, "Always clap at the end." Or not always clap at the end, but be positive about what you're saying. Umm, so even when you have a critique, like, turn it into something that is like, good. Like, "Oh that was really good, but let's try and work on this next time."

Layla further corroborated this when she said, “I think a lot of it . . . it comes from our training a lot. Something that the training emphasizes is that we have a lot of positive reinforcement.” These statements reflect the overall consensus from mentors that the training videos led them to use positive reinforcement as one of their main teaching strategies.

There was also a variety of evidence of mentors responding to their new musician’s unique needs. During my second of three observations, I recorded Ana, a new musician, saying something along the lines of, “I can’t do this,” but one of her mentors responded with, “It’s okay, you can do measure by measure.” This subtle adjustment, followed by the praise, “That was so good, Ana! Do you wanna try by yourself?” demonstrated that the students were able to adapt to the needs of their new musicians in the moment. Students also articulated that they were aware of these specific needs in their interviews. For instance, Abby mentioned this about her new musician, Sarah: “Attention-wise, she does kinda get distracted and we kinda have to reel her back in sometimes.” Additionally, Abby also commented on their group’s specific strategy for bringing Sarah back to focus: “We kinda, like, sing-song her name like ‘Sarah, Sarah,’ and we like tap her hand or tap her arm or something.” In my researcher journal, I had noted that Sarah was easily distracted (although usually from myself or Colleen, the special education teacher, stopping nearby to observe). But I had also noted that the mentors would sing her name to bring back her focus. Megan, another mentor in Sarah’s group, noted the exact same thing:

> She gets distracted a little. She kind of likes to, if she sees something more interesting going on, she likes to look at that instead of the music. Which is fine. We all get like that. But, we’ll like kinda sing to her and say like, “Sarah” and then she’ll pay attention and it’ll be fine.

The combination of mentors being aware of the needs of their new musicians, and teaching according to those needs, demonstrated aspects of a strong mentoring program that thrives due to elements like these.

Another theme that contributes to the success of this program is the prevalence of informal mentoring within mentor groups. Here is a description from Layla of how informal or unstructured mentoring manifests itself in this program:

> And then, my group completely changed sophomore to junior year, so it was a little bit of a shift from, like, just being a follower of the leader of our group, to actually having to lead 'cause I was the only one who had been with Sarah earlier. So that transition was a also inspiring or, like, I don't know how best to explain it, but it like showed me it's not as easy as it looks. . . . Every group has, like, a little mini-leader. So I had more respect for like the upperclassmen who were leading their groups a little.

Layla also indicated that these mini-leaders are not necessarily assigned by the club or her teacher: "Whoever usually knows the new musician the best and knows the instrument the best is usually the person who kinda just leads the group." Other mentors described similar experiences of letting an older member of the group take charge as a "mini-leader." Megan indicated that as a first-year mentor, she is "kind of more, letting [her] group members kind of show [her] what they do." And although she was the only first-year mentor who was interviewed, her comment is reflected in the initial experiences described by others like Jennifer:

> I started when I was a sophomore right? And I used to kind of just take the back seat and see how the seniors took charge and they were like, "Okay, we're gonna go through this, this and this." And now, I feel like I can add more to the group and like, "Oh Steve that's good! Let's try doing this too."

These statements also explain an observation I made during my first visit to the club. One of Ana's mentors was with the teacher, Alyssa, during the first portion of the mentoring session. I had noted how the group struggled with only two mentors present, and how the two mentors seemed unsure of what to do. However, upon the arrival of the third mentor, things suddenly became much more productive. When reviewing the video after the observation, I indicated in my researcher journal that: "Third student arrives – moves stand – takes charge and starts pointing." Overall, this hierarchy of leadership and use of informal mentoring was perceived to be useful by the students. They saw it as a way to become more comfortable in a new environment and to learn from their peers about how to best help their new musicians.

A final theme that emerged from this research question is the notion of members having a common goal or purpose driving them. Overall, the members of the group were focused on helping the new musicians become the best musicians possible. Layla summed up this point when she was describing the best part about the United Sound club:

> Umm, I think I like the whole group, like the entire club has one common goal of becoming better musicians. And I really like that . . . every single mentor is trying to help their new musician be the best. And, each new musician is trying to be their best. So, it's like a constant push for, we wanna improve we wanna be better. And like, doing it all while still having fun.

Rebecca also mentions the importance of fun with her statement, "Because, like, no matter, at the end of the day, it's to make sure he has fun playing his instrument, and [that] he learns something." Not only is Rebecca describing the importance of fun in the group, she is pointing out that the purpose is to make sure that the new musician is enjoying the experience. Her new musician, Steve, also felt that gaining musical skills was a key component of the program and

consistently mentioned throughout his interviews that if you wanted to become a better musician, joining United Sound was a great way to do so. During his first interview he mentioned, "Well the reason why I recommend [the program] is 'cause for so many people who are having trouble reading music with their string instruments."

While the previous statements reflect a drive for musical goals, Megan mentioned the importance of keeping the new musician at the forefront of their mission. She stated:

> But I knew Sarah, so that was the one thing that we all had in common. So the fact that we all knew Sarah and we were all there to help Sarah, we all kinda developed a friendship based on that.

The notion that all the mentors in that group were "there to help Sarah" provides further evidence of this common goal-oriented mindset.

Summary

In this chapter, I presented findings regarding participant perceptions of one another, perceived benefits of the mentoring program, and the factors that contribute to its success. All participants indicated that they view one another positively and teachers indicated that the program had positively impacted the way they view students with disabilities. However, discrepancies were discovered when the term disability was introduced into the conversation with peer mentors. The mentors were quick to state their admiration for their new musician but became hesitant when discussing their new musician's disability.

Students also indicated their perceived benefits for participating in the United Sound club. The benefits that were described were academic, musical, and social. The students described an increased sense of interpersonal skills, especially the development of teamwork while working in their mentoring groups. They also described scenarios of how these

interpersonal skills had helped them outside of United Sound. Additionally, the peer mentors explained an improved sense of pedagogical awareness due to their participation in the program. Finally, all participants felt that this was a fun and rewarding musical experience.

A few factors were identified that help contribute to the overall success of this particular United Sound club. One factor was that peer mentors demonstrated effective teaching strategies when helping their new musicians. These strategies included positive reinforcement and responding to their new musicians' needs. Informal mentoring also played a role in the success of the program. Older mentors often took on implicit leadership roles within their mentoring groups so that younger, first-year mentors could have the opportunity to learn. Finally, having a common, musical goal was identified by most participants as a driving component of the club.

Chapter 5: Discussion

The purpose of this study was to examine an extant peer mentoring program, to observe factors contributing to its success, and to better understand students' perceptions of the program. Three rounds of observations and two rounds of interviews were conducted to capture the mentoring program over a seven-week period. Interviews with six mentors, two new musicians, and two teachers yielded a variety of perspectives on how participants viewed one another and what they perceived as benefits from participating in the program. Observations corroborated their perspectives and also yielded insights into other factors contributing to the success of the mentoring program. The following discussion of findings will address each research question individually and will be followed by discussions about limitations, implications for teaching practice, and implications for future research.

Research Question 1: How do participants describe their views of one another?

Three themes were found from interviews and observations regarding participants' views of one another. 1) New musicians perceive their mentors as nice, helpful, and friends and mentors feel that this friendship is reciprocal. 2) There was a sense of discomfort from mentors when speaking specifically about the topic of disability. 3) Both teachers indicated a positive shift in their mentality about students with disabilities as a result of this program.

The finding of mutual admiration and friendship among peers in this mentoring program aligns with research from Johnson and Darrow (1997). In their study, they found that student attitudes toward inclusion can be improved when given the opportunity to view a 30-minute video that demonstrated good inclusion practices. While participation in a mentoring program for students with disabilities and viewing a video of inclusive practices are two different things,

simply being exposed to individuals with disabilities in any context may be a precursor for a friendly relationship to develop between students with and without disabilities.

Research from Darrow et al. (2009) demonstrated that participation in a mentoring program can be a catalyst for improving inclusive attitudes. They state that after their mentoring intervention, at-risk students, who served as mentors, "were more comfortable with persons who have disabilities than they were before the intervention" (p. 5). While the present study did not measure attitudes with quantitative measures, the glowing descriptions that mentors gave of their new musicians in the current study aligns well with Darrow et al. (2009). Additionally, both teachers in the current study indicated a positive shift in how they view students with disabilities. While Darrow et al. (2009) looked strictly at student attitudes, there is no reason to believe that shifting attitudes would be limited to students and not applicable to all participants.

Jellison et al. (1984) found evidence that a collaborative environment can help foster relationships. In their study they found that social interactions increased between students with and without disabilities in a small, collaborative learning group when compared to a control group. This is akin to findings in the present study in which students indicated interacting with their new musicians socially inside and outside of meetings. Colleen, the special education teacher, also confirmed that these social interactions were occurring outside of required mentoring sessions. Furthermore, mentors in the present study identified themselves as friends with their new musicians.

The second theme that emerged from these data was the discomfort expressed by the mentors in describing disability. Students appeared to be visually flustered by the question and were often hesitant in giving their answers. The existing literature includes several examples of students improving their attitudes toward students with disabilities, but it does not address the

finding of the theme of discomfort. A narrow discrepancy exists in this study in which mentors had very high opinions of their new musicians as individuals but were not as comfortable discussing how disability might shape those views. These findings demonstrate a nuanced gap in the literature where students may have a more positive attitude about students with disabilities after participating in a mentoring program, but they may not fully grasp the definition of disability and how it relates to the individuals with whom they work.

Research Question 2: What do students perceive to be benefits of the peer mentoring program?

Analysis of student interviews generated three themes about the perceived benefits of the United Sound program. These benefits spanned numerous areas and included academic, musical, and social benefits. These perceived benefits are interpersonal skills, pedagogical awareness, and having a fun/impactful musical experience.

It has been documented in prior research that mentors can also benefit from mentoring experiences. Karcher (2009) demonstrated that mentors who participated in a cross-age mentoring program were more connected to their school as a result of participating in the program. Additionally, the study showed that mentors also developed a stronger connection to peers. This supports the descriptions from mentors in the present study about developing greater teamwork and social skills with their peers.

Pedagogical awareness is another theme that is present in the body of literature on tutoring in music. Webb (2012) found that musical tutors were very aware of their pedagogical choices when working with tutees. The students in Webb's study indicated that they stayed within a pedagogical comfort zone based on their own experiences in private lessons. This mirrors comments from students in United Sound who stated that much of their pedagogical

awareness came from observing their respective orchestra teachers during their regular rehearsals. This is an important revelation, as students who may not have access to private lessons may depend on high quality instruction from their teachers to serve as their model.

The findings of the present study add to the broad evidence that participation in a mentoring program can have a positive impact on students' attitudes toward their peers with or without disabilities. This is in contrast to Cornacchio (2008), who found that there was no significant difference in acceptance of peers as a result of participating in a cooperative learning environment. The study was conducted with fourth graders, so transferability to the present study may be limited, as high schoolers may have a greater capability to reflect on their relationships.

It is important to note that meaningful musical experiences, such as performing alongside their new musicians, described by participants in United Sound are also absent in the literature. The students and teachers all described how impactful it was to see the smile on the new musicians' faces when they finished a piece at a concert. The absence of similar findings in the literature is likely due to the experimental design of many studies about mentoring, in which the main purpose of the study is to determine the effect of mentoring or tutoring on academic achievement or attitudes toward peers.

Research Question 3: What factors contribute to the success of this mentoring program?

Interviews and observations yielded three main themes that were contributing factors in the success of this mentoring program. 1) Effective teaching strategies were utilized by the mentors when working with their new musicians. 2) Informal mentoring took place amongst mentors within mentoring groups. 3) There was a common goal to provide positive musical experiences for the new musicians.

The first effective teaching strategy that I observed from mentors was positive reinforcement. Mentors were consistent with giving praise throughout mentoring sessions, either verbally or through physical actions like high-fives. This theme aligns with research conducted by Pinta (2013) and Gerrity et al. (2013). In Pinta's research, she indicated that rewarding good behavior was considered one of several helpful strategies for accommodating students with disabilities in a high school guitar class. Gerrity et al. also found that a positive atmosphere was an effective strategy for teaching students with disabilities in a weekly music program for children ages 7-14.

Pinta (2013) and Gerrity et al. (2013) also identified other strategies that are effective methods for teaching students with disabilities. Pinta (2013) found that slowing the pace of instruction, cooperative learning, and student choice were also effective methods for inclusive teaching. Gerrity et al. (2013) identified responding to student needs as an important teaching strategy. Similarly, the second effective teaching strategy that I observed in United Sound was mentors responding to the needs of their new musicians. Often times, this meant that mentors had to stop what they were teaching in order to bring their new musician back to focus or that they had to slow down their instruction to teach the music measure by measure, similar to Pinta (2013). Since positive reinforcement and adapting to student needs have been identified as effective strategies in the literature, it can also be understood that the use of these effective strategies helped to contribute to the overall success of the United Sound club.

Karcher et al., (2010) also documented how positivity from mentors can lead to positive outcomes for a mentoring program. In their study, they examined how mentors' attitudes shape mentee connectedness to school and academic achievement. Their results indicated that mentors with a positive attitude had a positive impact on their mentees' overall connectedness to their

schools. This corroborates findings in the music literature by Alexander and Dorow (1983), who found that tutees had significant performance gains when paired with tutors trained with approval techniques. As mentioned in the discussion of research question 1, the mentors in the United Sound program have very positive attitudes about their new musicians. This is represented in their effective use of positive reinforcement in their teaching. Like Karcher et al's. (2010) findings, it is likely that the positive attitudes and reinforcement from mentors contributes to the overall success of the mentoring program in the current study.

The second theme related to the success of the United Sound club involved informal mentoring. The topic of mentors mentoring each other did not arise in the literature, but the broader topic of informal mentoring was prominent. In Taylor's (2016) study about peer tutoring in a high school instrumental program, he indicated that informal mentoring was observed frequently and was found to be nearly as beneficial as the structured tutoring sessions themselves. Throughout the instrumental music department, students could be found assisting one another on their instruments and sometimes giving spontaneous tutoring sessions to their peers. Likewise, mentors in the United Sound Program took it upon themselves to share their teaching knowledge and skills with younger mentors in their group. Similar to Taylor, my findings suggest that this was a component that contributed to the success of this mentoring program.

Informal mentoring also emerged in a case study of a successful high school jazz band (Goodrich, 2007). While no formal mentoring program was in place from the director, the students took it upon themselves to mentor one another socially and musically. Goodrich indicated that students would assist one another musically in rehearsals, often times improving the efficiency of the rehearsal. He also indicated that a social hierarchy of leaders emerged

within the band. Students in the jazz band looked to specific peers within the ensemble as leaders who took charge socially, not necessarily musically. A quote from the Jazz Band director in Goodrich's study nicely sums up this trend, "You bring in the younger players and the older players teach the younger players. So you're never actually starting over" (p. 102). This is almost identical to the "team leaders" I observed in the United Sound program. Most mentors in the United Sound club identified that they had followed the lead of an older student when they first joined the club, and if it was their first year, they indicated that they were currently taking after a team leader.

The extant research is lacking information regarding the final theme of this research question. I did not identify any studies indicating that having a common goal as an organization leads to successful outcomes in peer mentoring. Since United Sound is a national organization with a clearly defined mission, this may contribute to its goal-oriented mindset. Additionally, the mentoring of students with disabilities may be more of a unifying factor than peer mentoring or peer tutoring programs that are set up to facilitate learning between similarly-developing peers. It is possible that students may find philanthropic motivations for mentoring students with disabilities, which in turn helps to create a common goal for an organization. More research is needed to understand how students perceive disability and what motivations they have for participating in mentoring programs like this one.

Limitations

Qualitative research represents the perceptions of participants as well as the views of the researcher in describing observed behaviors. As such, the present study should not be generalized to other mentoring programs. Instead, the findings of this study should be considered to represent a small population of students within extant mentoring programs in music classes in

public schools. A number of limitations should also be taken into consideration with the present study. For instance, only three complete mentoring groups returned IRB consent forms in order to be observed. This allowed for only 12 of the nearly 50 students in the program to be observed during mentoring sessions. Furthermore, only two of these groups could be interviewed due to time constraints. A more representative picture of the entire mentoring program could have been established with more groups being observed and more participants being interviewed.

The amount of observational time was also a slight issue in the study. Three rounds of observations with the three complete mentor groups were scheduled, but due to unforeseen absences not all groups were observed on all three occasions. During the first observation, a new musician who was not going to be observed was missing his mentors for that meeting. Sarah's group combined with his group to fill that gap, but because the other student had not consented, he could not be observed. Another new musician, Ana, was not able to attend the third scheduled observation, so I only observed that group twice as well. Furthermore, I had anticipated observing groups for approximately 45 minutes during each meeting but was surprised to learn that the groups combined to do a social activity at the beginning of each meeting. To respect the privacy of individuals who had not consented to participate, I had to begin my observations after the social activity, leaving roughly 15-20 minutes of time in the mentoring groups. This reduced amount of observation time from both absences and the unforeseen social activity limits the ability to thoroughly triangulate data from participant interviews. There were also a large number of performances that students participate in throughout the year. Since students frequently described how meaningful these performance opportunities were, it should be considered limiting that no performances were observed in the present study.

Additional unforeseen issues arose during interviews with students with disabilities. This was my first time interviewing students with disabilities, so these interactions were not always as fluid as they should have been. I did consult with the special education teacher prior to interviewing the students from the special education class, but felt that the modifications I had to make for Sarah's interview questions were lacking depth. For instance, many of Sarah's questions were changed to become either yes/no questions, or questions that provided a choice. For example, I altered the question: "How do you feel when some of your mentors are absent?" to include a follow-up with the options "happy, sad, or okay?" While I was able to gather useful data from my interviews with Sarah, more practice with interviewing students with disabilities could have created a smoother conversation in which I was prepared to ask probing questions in a way that allowed Sarah to express her opinions in her own way.

One final limitation of this study is that demographic data were not considered in the analysis of data. Of the 14 participants, only one male student was interviewed/observed. After discussing this with the orchestra teacher, Alyssa, I learned that there is only one male mentor in this United Sound chapter. Additionally, socioeconomic status was not considered while reviewing the data.

Implications for Teaching Practice

This study may have implications for how teachers implement and manage mentoring programs in their music programs. Teachers may find mentoring programs to be helpful in a variety of circumstances that extend beyond individuals with disabilities. Participants in this study indicated that they were friends with their new musician or mentor. Utilizing a mentoring program such as United Sound could be useful in welcoming new students into a program, whether they are from a special education classroom, or simply incoming freshmen.

Implications for the concept of disability are also brought about by the results of this study. Teachers in this study indicated a positive shift in their mentality toward students with disabilities as a result of United Sound. Both the orchestra teacher and the special education teacher indicated that they had to shift their expectations of what students with disabilities could accomplish. While this shift is perhaps more attributable to the act of witnessing the students practice and perform than to the mentoring itself, it does not discount the need for fostering meaningful experiences for students with disabilities to showcase their talents. In the case of this study, the mentoring program itself served as the vehicle for effective instruction and inclusion for students with disabilities. Music teachers might consider mentoring, alongside other accommodation strategies, as a means of fostering positive experiences for students with disabilities. Adequate training for mentors is one strategy that teachers could consider, especially if that training emphasizes best practices for inclusion in music classes, such as those described by Gerrity et al., (2013), Jellison et al. (1984), Pinta (2013), and Salvador (2016).

While mentors indicated a sense of friendship with their new musician, the term "disability" was met with some hesitation. Since young adolescents may not have a complete definition of disability, it is important for educators to provide solid working definitions so that students are comfortable in addressing the topic. It was exciting to witness the degree of comfort that mentors had when *interacting* with their peers with disabilities, but it was interesting to see how their tone changed to hesitation when *discussing* the topic. Students and teachers alike should learn the proper ways to discuss individuals with disabilities and other topics surrounding disability studies, especially if students and teachers are actively involved in teaching students from such populations. It should be noted too that while I chose to use the language of

"individuals with disabilities" for this study, other institutions, schools, and individuals may prefer different language like "special needs" or "students with exceptionalities".

Another consideration that teachers can draw from this study is the importance of their own pedagogical modeling. Mentors in the present study indicated that they utilized many rehearsal techniques and teaching strategies that they learned in orchestra class when helping their new musicians. Students who serve as mentors or section leaders can observe this modeling and begin to use it in their own teaching. This is also useful for schools who have chamber music as a component of their curriculum. Students who have consistently seen good rehearsal techniques will be able to apply that knowledge to their own chamber rehearsals. In order for students to best understand these good teaching practices, perhaps music educators could verbalize their thought process as they lead the class through warm-ups or various technical exercises. This way, students who may struggle to pick up on these strategies intuitively will be given the opportunity to understand and apply them as well.

One final implication for teachers is to consider the importance of informal mentoring. Younger students in the present study consistently indicated their reliance on older mentors' leadership in order to gain confidence in their own teaching. If music teachers can find ways to encourage this type of leadership behavior from older students, then they could open the door to more efficient rehearsals, greater camaraderie, and even higher-level musicianship. An example of this could be encouraging section leaders to learn one random fact about each member of their section each week or providing additional rehearsal responsibilities to section leaders. Perhaps section leaders could be allowed to walk around and check for technique during a run-through of a section of music. By allowing these informal leadership roles to develop, hopefully music educators will see a heightened sense of community and musicianship in their ensembles.

Implications for Future Research

The findings of the current study provide opportunities for future inquiry into the topic of peer mentoring students with disabilities in music contexts. The existing literature that relates to this topic is broad and covers many related areas such as peer tutoring and inclusive teaching practices. However, there is little research that specifically addresses the topic of peer mentoring students with disabilities in music contexts. Replications of the current study could provide insights into how other United Sound chapters function around the United States and what factors contribute to the success of each one. Furthermore, future replications of case studies like this one could attempt to expand the percentage of participants in order to generate a more complete picture of the mentoring program and all of its participants.

Future research could also address some of the limitations of the present study. As previously mentioned, there was a lack of gender diversity within this program. Given the size of this program, it is interesting that there was not a more balanced interest from multiple genders in becoming mentors. Anecdotal conversations with the orchestra teacher provided evidence that this gender gap is reversed in more rural schools that support United Sound clubs. New research could further examine gender diversity within United Sound clubs across the country.

Additional demographic information that was not studied was the high socioeconomic status of this school. The median income for families is over double the national average. Future researchers could conduct a multiple case study to compare the inner workings of various United Sound clubs, or send out surveys to gather demographic information on the various United Sound chapters nationwide. These studies could help provide insights into issues relating to gender or socioeconomic status within United Sound programs across the country. These studies could also examine how those demographic and socioeconomic factors may impact what kind of

schools can support United Sound programs. Schools with higher funding may be able to offer more resources for students with disabilities or may be able to fund adaptive instruments or other tools needed to teach music to students with disabilities.

Findings from the present study could also serve as a springboard for future research on the social aspects of mentoring students with disabilities. Students in the present study indicated a high degree of friendship with individuals in their mentoring group. Much of the existing literature demonstrates changes in attitudes toward disability over time but does not focus on overall relationship or friendship development. Further case study research may help to delve into student perspectives to better understand this finding. Future research could be conducted with surveys administered over time to track changes in participant attitudes toward disability. Additionally, journal entries and survey responses could be utilized to supplement any findings from participant interviews. This extensive probing could also lead to understanding the distinction that was witnessed in this study between students being comfortable *interacting* with peers with disabilities, but being less comfortable *discussing* the concept of disability.

The current study could also be adapted to experimental methods. An important element related to positive reinforcement in the United Sound Club was the use of training videos for the mentors. Five of the six mentors who were interviewed indicated that their viewing of the training videos informed their conscious use of positive reinforcement with the new musicians. While experimental studies do briefly train tutors, it has yet to be examined as its own variable in research. Future research of mentoring programs could utilize an experimental design to measure this variable specifically to see if this is truly a useful tool for fostering success in a mentoring program. Additional experimental studies could be created to examine if peer mentoring is an effective strategy for improving musical achievement for students with disabilities. The new

musicians in the study indicated how much they enjoyed the experience, but it is unclear how much musical progress was made over time. Experimental methods could be used to examine performance achievement in a longitudinal way for students with disabilities.

Conclusion

The purpose of this study was to examine an extant chapter of the United Sound program to determine what students perceive as benefits of the program, and to observe what elements of the program contribute to its success. Observations of three mentor groups were conducted during mentoring sessions on three different occasions. After two of these observations, interviews were conducted with 10 of the 14 participants for a total of 20 interviews. Two of these participants were the teachers/club sponsors of this United Sound club. The results indicated that there was a mutual friendship between mentors and new musicians and that both teachers had a positive shift in their mentality about students with disabilities. This contrasts slightly with their students who, while comfortable working with their new musicians with disabilities, were demonstrably uncomfortable when discussing the topic of disability. In addition to these themes, students indicated that the program benefited them by helping them to develop interpersonal skills, creating a greater sense of pedagogical awareness, and providing a fun/meaningful musical experience. Additional themes were found that relate to the overall success of the program. These were effective teaching strategies, informal mentoring, and having a common goal. These themes both add to and expand on existing literature on mentoring.

It is important for music educators to continue to find ways to include students with disabilities in their music programs. Results of the present study provide evidence that mentoring programs can be useful in creating musical opportunities for this population of students. Further

research is needed to better understand how mentoring programs function effectively and how mentoring may shape mentee outcomes when working with students with disabilities.

References

Alexander, L., & Dorow, L. G. (1983). Tutoring effects on the music performance of tutors and tutees in beginning band classes. *Journal of Research in Music Education, 31*(1), 33-47. https://doi.org/10.2307/3345108

Americans With Disabilities Act of 1990, 42 U.S.C.A. § 1201 *et seq.*

Andrews, K. (2013). Standing 'on our own two feet': A comparison of teacher-directed and group learning in an extra-curricular instrumental group. *British Journal of Music Education, 30*(1), 125-148. https://doi.org/10.1017/S0265051712000460

Baglieri, S., & Shapiro, A. (2012). *Disability studies and the inclusive classroom: Critical practices for creating least restrictive attitudes*. Routledge.

Battle, J., (2005). *Culture free self-esteem inventories*, *3rd ed*. Psychological Assessment Resources, Inc.

Cornacchio, R. A. (2008). *Effect of cooperative learning on music composition, interactions, and acceptance in elementary school music classrooms* (3325655) [Doctoral dissertation, University of Oregon]. Proquest Dissertations and Theses database.

Darrow, A. A., Gibbs, P., & Wedel, S. (2005). Use of classwide peer tutoring in the general music classroom. *Update: Applications of Research in Music Education, 24*(1), 15-26. https://doi.org/10.1177/87551233050240010103

Darrow, A. A., Novak, J., Swedberg, O., Horton, M., & Rice, B. (2009). The effect of participation in a music mentorship program on the self-esteem and attitudes of at-risk students. *Australian Journal of Music Education, 2*, 5-16.

Froehlich, H., & Frierson-Campbell, C. (2013). *Inquiry in music education: Concepts and methods for the beginning researcher*. Routledge.

Geddes, D. (2016). *A case study of the impact of peer-to-peer mentoring on mentors in a rural high school setting* (10249651) [Doctoral dissertation, Concordia University-Portland]. Proquest Dissertations and Theses database.

Gerrity, K. W., Hourigan, R. M., & Horton, P. W. (2013). Conditions that facilitate music learning among students with special needs: A mixed methods inquiry. *Journal of Research in Music Education*, *61*(2), 144-159. https://doi.org/10.1177/0022429413485428

Gfeller, K., Darrow, A. A., & Hedden, S. K. (1990). Perceived effectiveness of mainstreaming in Iowa and Kansas schools. *Journal of Research in Music Education*, *38*(2), 90- 101. https://doi.org/10.2307/3344929

Goodrich, A. (2007). Peer mentoring in a high school jazz ensemble. *Journal of Research in Music Education*, *35*(2), 94-114. https://doi.org/10.1177/002242940705500202

Herrera, C., Grossman, J. B., Kauh, T. J., Feldman, A. F., McMaken, J., & Jucovy, L. Z. (2007). *Big Brothers Big Sisters school-based mentoring impact study*. Philadelphia, PA: Public/Private Ventures.

Holstein, J. A., & Gubrium, J. F. (1995). *The active interview*. SAGE Publications, Inc.

Jastak, S., & Wilkinson, G. (1994). *Wide range achievement test (3rd ed.)*. San Antonio, TX: The Psychological Corporation.

Jellison, J. A., Brooks, B. H., Huck, A. M. (1984). Structuring small groups and music reinforcement to facilitate positive interactions and acceptance of severely handicapped students in the regular music classroom. *Journal of Research in Music Education*, *32*(4), 243-264. https://doi.org/10.2307/3344923

Jellison, J., Brown, L., & Draper, E. (2015). Peer-assisted learning and interactions in inclusive music classrooms: benefits, research, and applications. *General Music Today*, *28*(3), 18-22. https://doi.org/10.1177/1048371314565456

Johnson, C. M., & Darrow, A. A. (1997). The effect of positive models of inclusion on band students' attitudinal statements regarding the integration of students with disabilities. *Journal of Research in Music Education, 45*(2), 173–184. https://doi.org/10.2307/3345578

Johnson, E. A. (2011). The effect of peer-based instruction on rhythm reading achievement. *Contributions to Music Education, (38)*2, 43-60. www.jstor.org/stable/24127190

Johnson, E. (2015). Peer-teaching in the secondary music ensemble. *Journal of Education and Training Studies, 3*. https://doi.org/10.11114/jets.v3i5.906

Karcher, M. J. (2001, August 24). *Measuring adolescent connectedness: Four validation studies.* [Poster session]. Convention of the American Psychological Association, San Francisco, CA.

Karcher, M. (2005). The effects of developmental mentoring and high school mentors' attendance on their younger mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools, 42*(1), 65-77. https://doi.org/10.1002/pits.20025

Karcher, M. (2009). Increases in academic connectedness and self-esteem among high school students who serve as cross-age peer mentors. *Professional School Counseling, 12*(4), 292-299. https://doi.org/10.1177/2156759X0901200403

Karcher, M. J., Davidson, A. J., Rhodes, & Herrera, C. (2010). Pygmalion in the program: The role of teenage peer mentors' attitudes in shaping their mentees' outcomes. *Applied Developmental Science, 14*(4), 212-227. https://doi.org/10.1080/10888691.2010.516188

Karcher, M. J., Davis, C., III, & Powell, B. (2002). The effects of developmental mentoring on connectedness and academic achievement. *The School Community Journal, 12*(2), 35-50.

Kinyon, J., Berg, R., & McKay, G. (1960). *The band* booster. Warner Bros. Inc.

Lapka, C. (2006). Student with disabilities in high school band: “We can do it!”. *Music Educators Journal*, *92*(4), 54-59. https://doi.org/10.2307/3401113

Leon Inventory of Kindergarten Entering Skills. (1984). Division of Administrative Services, Leon County Schools, Tallahassee, FL.

Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from “Case study research in education”.* Jossey-Bass Publishers.

Madsen, C. K., Smith, D. S., & Feeman, C. C., Jr. (1988). The use of music in cross-age tutoring within special education settings. *Journal of Music Therapy*, *25*(3), 135-144. https://doi.org/10.1093/jmt/25.3.135

Nabb, D., & Balcetis, E. (2010). Access to music education: Nebraska band directors' experiences and attitudes regarding students with physical disabilities. *Journal of Research in Music Education, 57*(4), 308-319. https://doi.org/10.1177/0022429409353142

Ogilvie, C. R. (2011). Step by step: Social skills instruction for students with autism spectrum disorder using video models and peer mentors. *TEACHING Exceptional Children*, *43*(6), 20–26. https://doi.org/10.1177/004005991104300602

Pinta, K. J. (2013). *Inclusion strategies for the high school guitar class* (1416462400) [Master's thesis, California State University, Long Beach]. ProQuest Dissertations & Theses Global.

Pennebaker, J. W., Chung, C. K., Ireland, M., Gonzales, A. & Booth, R. J. (2007). *Linguistic inquiry and word count (LIWC).* LIWC, Inc

Salvador, K. (2016). Music instruction for elementary students with moderate to severe cognitive impairments: A case study. *Research Studies in Music Education, 37*(2), 161–174. https://doi.org/10.1177/1321103X15613645

Sheldon, D. A. (1997). Research into practice: Peer tutoring—students helping students, and hearing from the podium. *Illinois Music Educator, 57*(3), 44-45.

Sheldon, D. A. (2001). Peer and cross-age tutoring in music: Peer and cross-age tutoring allows music students to help each other and benefits both the music teacher and the students themselves. *Music Educators Journal, 87*(6), 33–38. https://doi.org/10.2307/3399690

Rodriguez, N. U. (2010). *Upper classmen's valuation of their roles as mentors to new ninth graders: A case study in a diverse suburban high school* (3418473) [Doctoral dissertation, Virginia Commonwealth University]. Proquest Dissertations and Theses database.

Roulston, K. (2010). *Reflective interviewing: A guide to theory and practice.* Sage Publications.

Scott, L. P., Jellison, J. A., Chappell, E. W., & Standridge, A. A. (2007). Talking with music teachers about inclusion: Perceptions, opinions and experiences. J*ournal of Music Therapy, 44*(1), 38-56. https://doi.org/10.1093/jmt/44.1.38

Sources of Strength, (n.d.). Retrieved June 01, 2020, from https://sourcesofstrength.org/

Taylor, J. E. (2016). *Peer-mentoring within the middle and high school music department of the International School of Kuala Lumpur: A case study* (10135020) [Doctoral dissertation, Boston University]. Proquest Dissertations and Theses database.

United Sound. (2016a). *Mission and goals.* http://www.unitedsound.org/mission/

United Sound. (2016b). *United Sound: Relationships that resonate.* http://www.unitedsound.org/

VanWeelden, K., Heath-Reynolds, J., & Leaman, S. (2017). The effect of a peer mentorship program on perceptions of success in choral ensembles: Pairing students with and without disabilities. *Update: Applications of Research in Music Education, 36*(1), 37-43. https://doi.org/10.1177/8755123316675480

Vanweelden, K., & Whipple, J. (2014). Music educators' perceived effectiveness of inclusion. *Journal of Research in Music Education, 62*(2), 148-160. https://doi.org/10.1177/0022429414530563

Vispoel, W. (1994). Integrating self-perceptions of music skill into contemporary models of self-concept. *The Quarterly Journal of Music Teaching and Learning, 5*(4), 42-57.

Voeltz, L. M. (1980). Children's attitudes toward handicapped peers. *American Journal of Mental Deficiency, 84*, 455-464.

Webb, R. S. (2012). *Construction of musical understandings: An exploration of peer tutoring in the school orchestra program* (3527642) [Doctoral dissertation, Northwestern University]. Proquest Dissertations and Theses database.

Wyman, P. A., Brown, H., LoMurray, M., Schmeelk-Cone, K., Petrova, M., Yu, Q.,… Wang, W. (2010). An outcome evaluation of the Sources of Strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health, 100*(9), 1653-1661. https://doi.org/10.2105/AJPH.2009.190025

Yager, S., Johnson, R. T., Johnson, D. W., & Snider, B. (1985). The effect of cooperative and individualistic learning experiences on positive and negative cross-handicap relationships. *Contemporary Educational Psychology, 10*(2), 127–138. https://doi.org/10.1016/0361-476X(85)90013-X

Appendix A

Interview Questions for Mentors

1. Tell me about your experience in orchestra this year.
2. Do you have a leadership role in United Sound? If so, what is that role?
3. Regarding the mentoring program, what are your feelings about this year?
4. Why did you choose to get involved with this mentoring program?
5. Have you had previous experiences with individuals with disabilities?
6. How long have you been working with your mentors/mentee?
7. Tell me about your experience with your mentee.
8. Tell me about your experience working with the other mentors in your group.
9. How do you think this "working together" has influenced you as a student?
10. How do you think this "working together" has influenced you as a musician?
11. How have your relationships with your fellow mentors changed during this time of working together?
12. How has your relationship with your mentee changed during this time of "working together"?
13. What do you like best about the experience?
14. What could be improved about this experience?
15. What are some of the challenges of working together with the other mentors and your mentee in this environment?
    a. How have you worked through some of these challenges?
16. What opportunities do you have to interact with your mentor group/mentee outside of organized meetings?

Appendix B

Interview Questions for Teachers

1. Why did your school originally start this program with United Sound, and how long has this program existed at your school?
2. What role do you serve in overseeing the mentoring program?
3. What, if any, impact have you observed this peer-mentoring program having for the mentors and mentees involved?
4. What, if any, impact has the mentoring program had on the orchestra program as a whole?
5. What challenges have you observed for the mentors and mentees involved?
6. What challenges have you personally experienced in organizing and leading this program? (question for teachers only)
7. Have you noticed a shift in student perceptions of disability as a result of this program?
8. If you could change the mentoring program in any way, how would you do so?
9. Would you recommend this mentoring program to other schools? Why?
   Why not?

Appendix C

Interview Questions for New Musicians

Adapted Questions for Steve

1. Did you perform at BOA? How was that?
2. What is your role as a leader in the United Sound Club?
3. Regarding United Sound, what are your feelings about this year?
4. Why did you choose to get involved with this mentoring program?
5. Tell me about your experience with your mentors.
6. What do you like best about the experience?
7. What could be improved about this experience?
8. What are some of the challenges of working together with your mentors in this environment?
    a. Is it ever hard to work with your mentors?
9. What opportunities do you have to interact with your mentor group outside of organized meetings?
10. How long have you been working with your mentors?
11. Describe your experience working with your mentor group?
12. How do you think this "working together" has influenced you as a student?
13. How do you think this "working together" has influenced you as a musician?
14. How has your relationship/have your relationships with your peers (mentors and mentees) changed during this time of working together?
15. If you could change the mentoring program in any way, how would you do so?

16. Would you recommend this mentoring program to other students at this school? Why? Why not?
17. Do you have experiences with mentoring outside of music, and how is this similar or different?

Adapted Questions for Sarah

1. Did you perform at BOA? How was that?
2. Do you like music?
    a. What do you like about it?

1. Regarding United Sound, what are your feelings about this year (so far)?
    a. How do you feel about United Sound so far?
    b. What do you like about United Sound?
    c. What don't you like about United Sound?
2. What is your favorite thing about United Sound?
    a. Least Favorite?
3. Why did you choose to get involved with United Sound?
4. Tell me about your experience with your mentors.
    a. What are your mentors like?
    b. Do you like your mentors?
5. How long have you been working with your mentors?
    a. How long have you been in United Sound?
6. Describe your experience working with your mentor group?
    a. What is it like to work with your mentors?
7. How do you think this "working together" has influenced you as a student?

   a. Has working with mentors influenced you as a student at school?

8. How do you think this "working together" has influenced you as a musician?
   a. How has this program influenced you as a musician?
   b. How has United Sound influenced your music making?
9. What are some of the challenges of working together with your mentors in this environment?
   a. Is there anything that is hard about working in your group?
   b. Is it ever hard to work with your mentor group? Or is it easy to work with your group?
10. Do you get to see your mentors at school?
   a. What do you do? Where do you see them?